Predictive Ability of a Behavioral Approach to Dietary Assessment: An Analysis of Fat Intake

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Beltsville Human Nutrition Research Center
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by

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Predictive Ability of a Behavioral Approach to Dietary Assessment: An Analysis of Fat Intake

Executive Summary

The principal objective is to ascertain the predictive ability of the Avoidance-Modification Substitution-Replacement (AMSR) model in the assessment of fat intake. From this analysis, we can identify the set of questions with the most explanatory power or predictive validity regarding fat intake. Armed with this information, it may be possible to reduce the number of questions that are asked on the Diet and Health and Knowledge Survey (DHKS) about dietary behaviors related to fat intake.

In the 1994-96 DHKS, there are 19 fat-related behavior questions as exhibited in Table ES-1. Based on work by Kristal, etal. (1990, 1992) we grouped the behavioral questions on the 1994-96 DHKS related to fat according to avoidance, modification, substitution, and replacement (AMSR). One question pertains to replacement; six with substitutes; three with modification; and nine with avoidance. With this grouping, 162 possible combinations of questions emerge which deal with dimensions of dietary behavior. Each combination includes four questions, with one question from each type of behavior category–one avoidance question, one modification question, one substitution question, and one replacement question. With this grouping, we may determine which AMSR combination best correlates with fat intake. Alternatively, we also analyze all 19 queries taken together to determine the best set of AMSR questions relating to fat intake.

Table ES-1. Grouping of Behavioral Questions on the 1994-96 DHKS Related to Fat According to Avoidance, Modification, Substitution, and Replacement.

Classification for Questions:

A=Avoidance
M=Modification
S=Substitution
R=Replacement

26. Now think about the foods you eat. Would you say you always, sometimes, rarely, or never (HABIT)?

S a. Eat lower-fat luncheon meats <u>instead</u> of regular luncheon meats?

S b. Use skim or 1% milk <u>instead</u> of 2% or whole milk?

S c. Eat special, low-fat cheeses, when you eat cheese?

S d. Eat ice milk, frozen yogurt, or sherbert <u>instead</u> of ice cream?

S e. Use low-calorie <u>instead</u> of regular salad dressing?

R f. Have fruit for dessert when you eat dessert?

S g. Eat fish or poultry <u>instead</u> of meat?

A 27. When you eat baked or boiled potatoes, how often do you add butter, margarine, or sour cream?

always (almost always)	1
sometimes	2
rarely	3
never	4
do not eat baked or boiled potatoes	5

A 28. When you eat other cooked vegetables, do you always, sometimes, rarely, or never eat them with butter or margarine added?

always (almost always)	1
sometimes	2
rarely	3
never	4
do not eat cooked vegetables	5

A 29. When you eat other cooked vegetables, do you always, sometimes, rarely, or never eat them with cheese or another creamy sauce added?

always (almost always)	1
sometimes	2
rarely	3
never	4

M 30. When you eat chicken, do you always, sometimes, rarely, or never eat it fried?

always (almost always)	1
sometimes	2
rarely	3
never	4
do not eat chicken	5

M 31. When you eat chicken, do you always, sometimes, rarely, or never remove the skin?

always (almost always)	1
sometimes	2
rarely	3
never	4

A 32. Would you describe the amount of butter or margarine you usually spread on breads and muffins as...

none	1
light	2
moderate, or	3
generous?	4

A 33(a): About how many times a week do you eat bakery products like cakes, cookies, or donuts?

less than once a week/never	1
1-3	2
4-6	3
7 or more	4

A	33(b).	About how many times in a week do you eat chips, such as potato or corn chips?	
		less than once a week/never	1
		1-3	2
		4-6	3
		7 or more	4
A	34.	At your main meal, about how many times in a week do you eat beef, pork or lamb?	
		less than once a week/never	1
		1-2	2
		3-4	3
		5-7	4
		do not eat meat	5
A	35.	When you eat meat (beef, pork, or lamb) do you usually eat...	
		small,	1
		medium, or	2
		large portions?	3
		do not eat meat	5
M	36.	When you eat meat and there is visible fat, do you trim the fat always, sometimes, rarely, or never?	
		always (almost always)	1
		sometimes	2
		rarely	3
		never	4
		never eat meat with visible fat	5
A	37.	How many eggs (plain eggs, not egg substitutes or eggs in mixed dishes or baked goods) do you usually eat in a week?	
		less than 1/none	1
		1-2	2
		3-4	3
		5 or more	4

Subsequently, we develop regression models to evaluate the association of each of the fat-related dietary habits with fat intake. The dependent variable in these models may be characterized by one of three ways:

(a) the percentage of calories from all fats (% CFFAT);

(b) whether an individual has a total fat intake level no more than 30 percent of total caloric intake, the dietary guideline for fat (FATGUIDE); or

(c) the percentage of calories from saturated fat (% CFSFAT).

Previous studies (Putler and Frazao (1994); Haines, Guilkey, and Popkin (1988); Nayga (1994)) demonstrate the importance of particular factors in explaining differences in fat intake: (1) body mass index; (2) level of exercise; (3) special dietary behavior (whether or not an individual is on a low-fat or low-calorie diet or whether or not an individual is a vegetarian); (4) residence (region and/or urbanization); (5) employment status of female head; (6) reported day (of the week) of intake; (7) participation in public assistance or government programs (e.g., WIC or Food Stamp Program); (8) perceived health status; (9) seasonality; (10) smoking status; (11) race and origin; (12) education level; (13) gender; (14) income or poverty category; (15) age; (16) pregnancy or lactating status; and (17) household size.

Given the importance of these factors documented from previous research efforts, we employ them as independent variables. As exhibited in Figure ES-1, these exogenous factors may be broadly classified as: (1) dimensions of dietary behavior; (2) demographic factors; (3) characteristics of individuals; and (4) other factors. By controlling for other potential determinants of fat intake, we minimize the confounding of the dimensions of dietary behavior with demographic factors, characteristics of individuals, and other factors. In this fashion, we obtain more precise estimates of the impacts of dietary behavior on fat intake.

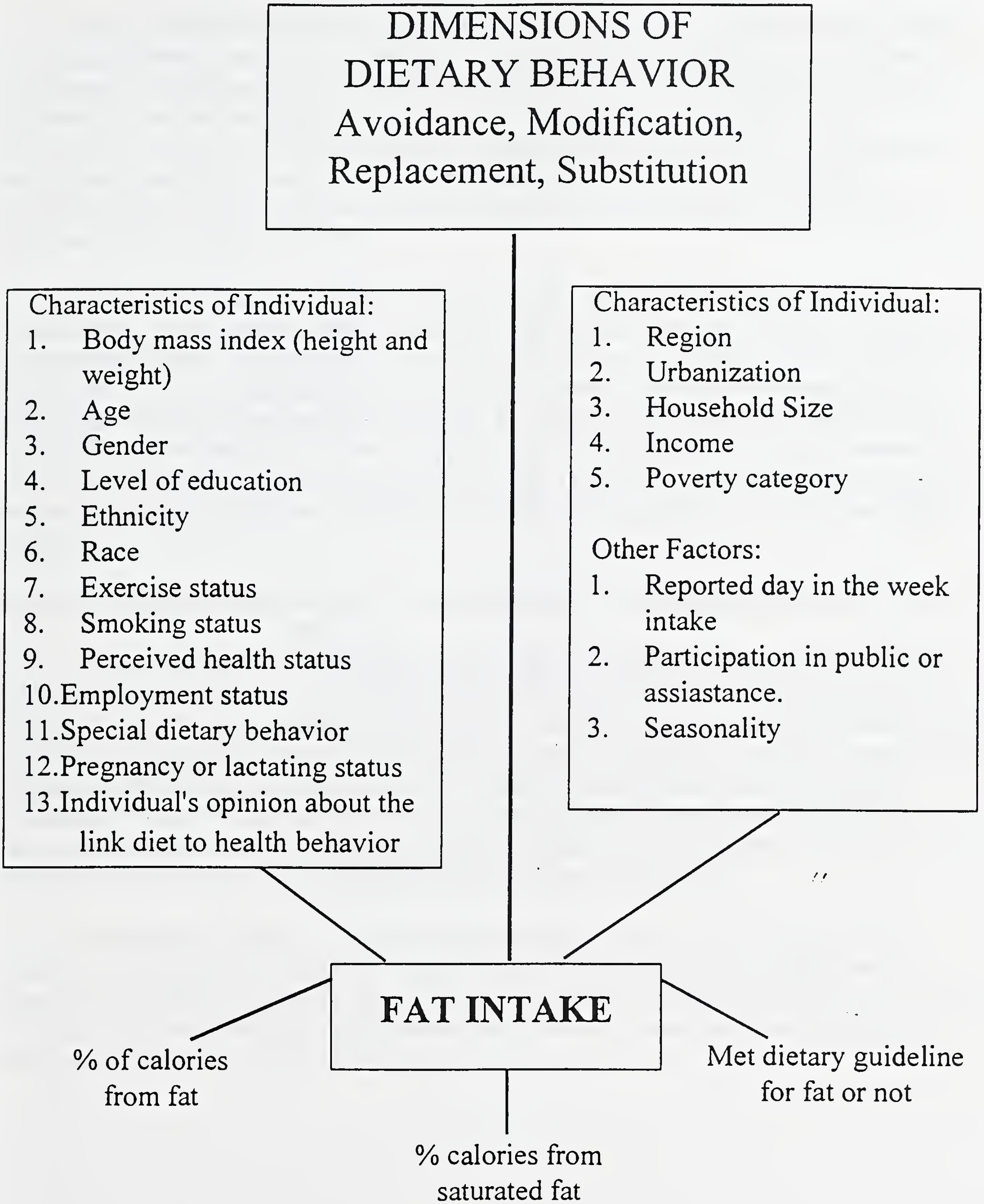
Mathematically then, we may write the multiple regression models as follows:

(1) %CFFAT = f_1(dimensions of dietary behavior: characteristics of individuals; demographic factors; other factors), where %CFFAT is the percentage of calories from fat

(2) %CFSFAT = f_2(dimensions of dietary behavior: characteristics of individuals; demographic factors; other factors), where %CFSFAT is the percentage of calories from saturated fat

(3) FATGUIDE= f_3(dimensions of dietary behavior: characteristics of individuals; demographic factors; other factors), where FATGUIDE is 1, if individual has a total fat intake level $\leq$ 30 percent of total caloric intake; 0 otherwise

Figure ES-1. Framework for Analysis



Summary of Analysis Pertaining to Combinations of AMSR Questions

Clearly from Table ES-2, avoidance questions 27, 28, 34, and 37; modification question 30; and substitution questions 26a, 26b, 26c, 26d are statistically significant in over 90 percent of combinations in analyses of percentage of calories from total fat, percentage of calories from saturated fat, and the dietary guideline for fat. Avoidance questions 33a, 33b, and 35; modification questions 31 and 36; substitution question 26g, and replacement question 26f are statistically significant in less that 70 percent of combinations in analyses of fat intake. Avoidance questions 29 and 32 and substitution question 26e are significant in 88 percent of combinations in analysis of fat intake.

Up to this point, 162 combinations of avoidance, modification, substitution, and replacement (AMSR) questions were considered in assessing the predictive ability of the model developed by Kristal. In this section, we consider all avoidance, modification, substitution, and replacement questions simultaneously in assessing fat intake. We discuss empirical results for percentage of calories from total fat; percentage of calories from saturated fat; and meeting/not meeting the dietary guidelines for fat. Associated with each of these three ways to describe fat intake, there are four analyses - - one for 1994, one for 1995, one for 1996, and a pooled analysis across the three years. Because of sample size considerations, emphasis is place on the polled analyses.

Summary of Analysis Considering All 19 AMSR Questions Simultaneously (Tables ES-3 - ES-5)

In considering all AMSR questions simultaneously, based on data pooled from 1994 to 1996, avoidance questions 37; modification questions 30 and 36; and substitution questions 26b and 26c are statistically significant in explaining the variability in the percentage of calories from total fat, the percentage of calories for saturated fat, and in ascertaining whether or not the dietary guideline for fat is met. Avoidance questions 27 and 32 are important in considering the percentage of calories from saturated fat. Avoidance question 35 is important in considering the dietary guideline for fat. Additionally replacement question 26f is a key determinant in explaining the variability in the percentage of calories from saturated fat.

Modification question 31, and substitution questions 26a, 26d, 26e, 26 g are not important statistically in assessing fat intake. That is, with the full slate of AMSR questions, these questions are not statistically significant in any analysis. Avoidance questions 28, 33a, and 34 are not important statistically using pooled data. However, these questions are significant in analyses based on data from particular years.

Table ES-2. A Summary of Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model in Assessing Fat Intake.

AVOIDANCE QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	Percentage of calories from fat	Percentage of calories from saturated fat	Dietary guideline for fat	Percentage of all combinations statistically significant
27	54/54	54/54	40/54	91.3
28	54/54	54/54	48/54	96.2
29	52/54	53/54	36/54	87.0
32	54/54	54/54	36/54	88.8
33a	13/54	18/54	20/54	31.4
33b	36/54	36/54	2/54	48.1
34	53/54	54/54	44/54	93.2
35	36/54	38/54	38/54	69.1
37	54/54	54/54	54/54	100.0
MODIFICATION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
30	162/162	162/162	156/162	98.7
31	85/162	107/162	102/162	60.4
36	103/162	103/162	45/162	51.6
SUBSTITUTION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
26a	80/81	77/81	80/81	97.5
26b	81/81	81/81	81/81	100.0
26c	81/81	81/81	81/81	100.0
26d	78/81	76/81	81/81	96.7
26e	78/81	63/81	74/81	88.4
26g	58/81	55/81	40/81	62.9
REPLACEMENT QUESTION	# COMBINATIONS STATISTICALLY SIGNIFICANT			
26f	254/486	423/486	161/486	57.4

Level of significance = 0.05

Table ES-3. Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Percentage of Calories from Total Fat - - All 19 Questions Considered Simultaneously

Avoidance Questions	1994	1995	1996	Pooled
		p-values		
27	.01630*	.00215*	.20761	.00004*
28	.01486*	.70061	.15525	.30008
29	.26750	.00308*	.10661	.02036*
32	.89935	.02496*	.06964	.01749*
33a	.90435	.60352	.14458	.79246
33b	.09187	.04974*	.05510	.05745
34	.01998*	.80943	.18680	.58366
35	.37472	.04488*	.73921	.06387
37	.00016*	.00003*	.00832*	.00000*
Modification Questions				
30	.06133	.00489*	.31587	.00011*
31	.68849	.62331	.06785	.26362
36	.00073*	.59861	.25926	.03062*
Substitution Questions				
26a	.79720	.07659	.72501	.35901
26b	.00746*	.00008*	.05577	.00000*
26c	.00250*	.21022	.35979	.00244*
26d	.50280	.47120	.05233	.07507
26e	.90186	.99319	.66918	.87954
26g	.09225	.20523	.85746	.21677
Replacement Question				
26f	.91065	.45137	.09415	.12649
n	1612	1734	1680	5026
R^2 ($\bar{R}^2$)	.2268 (.1810)	.2291 (.1868)	.2147 (.1702)	.1841 (.1693)
F (all AMSR questions)	.00000	.00000	.00000	.00000

Level of significance = 0.05

Table ES-4. **Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Percentage of Calories from Saturated Fat - - All 19 Questions Considered Simultaneously**

Avoidance Questions	1994	1995	1996	Pooled
		p-values		
27	.06060	.00421*	.05300	.00013*
28	.00726*	.89223	.17725	.31264
29	.03183*	.01166*	.48069	.57549
32	.94060	.02199*	.16668	.04759*
33a	.55502	.22569	.71188	.63783
33b	.08304	.04917*	.00925*	.01674*
34	.02369*	.64622	.06188	.26565
35	.25809	.09923	.84080	.08704
37	.00011*	.00037*	.01772*	.00000*
Modification Questions				
30	.17785	.00141*	.09146	.00005*
31	.55771	.33767	.12759	.21809
36	.00099*	.72189	.22989	.02678*
Substitution Questions				
26a	.53838	.17851	.59266	.28198
26b	.04400*	.00011*	.12184	.00007*
26c	.03753*	.26094	.47419	.00844*
26d	.66509	.43397	.16553	.26677
26e	.80237	.93160	.65803	.90404
26g	.04341*	.11607	.92365	.09956
Replacement Question				
26f	.73026	.18582	.05440	.01637*
n	1612	1734	1680	5026
R^2 ($\bar{R}^2$)	.2258 (.1800)	.2432 (.2018)	.2202 (.1760)	.1920 (.1773)
F (all AMSR questions)	.00000	.00000	.00000	.00000

Level of significance = 0.05

Table ES-5. **Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Meeting the Dietary Guideline for Fat - - All 19 Questions Considered Simultaneously**

Avoidance Questions	**1994**	**1995**	**1996**	**Pooled**
		p-values		
27	.46694	.00685*	.79818	.16700
28	.27591	.39342	.01953*	.34283
29	.73914	.01733*	.06394	.06763
32	.49261	.25319	.01338*	.15315
33a	.52017	.25513	.04798*	.66155
33b	.06449	.19641	.91045	.23871
34	.06589	.99620	.72695	.71383
35	.01197*	.12690	.57218	.00821*
37	.00174*	.00022*	.00663*	.00000*
Modification Questions				
30	.43217	.14097	.51467	.02284*
31	.69697	.30463	.52681	.41665
36	.00603*	.19246	.59522	.00906*
Substitution Questions				
26a	.63692	.46973	.51609	.76266
26b	.07577	.00080*	.15734	.00012*
26c	.00457*	.04790*	.69233	.00676*
26d	.40870	.61937	.18083	.14001
26e	.55184	.75448	.41014	.81403
26g	.12399	.59945	.57966	.40230
Replacement Question				
26f	.80068	.84798	.04271*	.28605
n	1612	1734	1680	5026
McFaddin's R^2 (Prediction-Success Ratio)	.14871 (72.29%)	.14209 (72.60%)	.12906 (70.17%)	.10329 (71.13%)
χ^2 (all AMSR Questions)	.00000	.00000	.00000	.00000

Level of significance = 0.05

Additional Determinants of Fat Intake

As a by-product of this analysis, we are in a position to ascertain additional determinants of the percentage of calories from either total fat or saturated fat as well as the dietary guideline for fat. In this discussion, we consider all AMSR questions simultaneously using data pooled over the years 1994 to 1996.

As delineated in Table ES-6, there are 10 additional key factors of the percentage of calories from total fat; 9 of the percentage of calories from saturated fat; and 9 for the dietary guideline for fat. The common additional determinants across the board are: (1) low-fat diet; (2) region; (3) age; (4) race; (5) body mass index; and (6) smoking status.

Recommendations

Based upon the summary of analyses pertaining to the combinations of AMSR questions as well as the summary of analyses considering all 19 AMSR questions simultaneously, we make the following recommendations. Clearly Kristal *et al*'s model of avoidance, modification, substitution, and replacement is a useful construct in the analysis of patterns regarding fat intake. Also, substitution questions 26b and 26c; modification question 30; and avoidance question 37 unequivocally are the best questions in terms of statistical significance across all analyses. Clearly, we recommend that questions 26b, 26c, 30, and 37 be retained for future surveys. As well avoidance question 33a; modification question 31; and substitution question 26g are not statistically important in assessing fat intake. Without question, there is overwhelming statistical evidence to recommend elimination of these questions. In case of the remaining 12 questions - - 26a, 26d, 26e, 26f, 27, 28, 29, 32, 33b, 34, 35, and 36, the statistical evidence is mixed. Taking a conservative stance, we recommend that these questions be retained for future surveys despite the fact that they may have limited usefulness in assessing fat intake.

Table ES-6. Additional Determinants of Percentage of Calories from Either Total Fat or Saturated Fat as well as the Dietary Guideline for Fat - - All 19 Questions Considered Simultaneously Using Pooled Data from 1994-1996

PERCENTAGE OF CALORIES FROM TOTAL FAT	PERCENTAGE OF CALORIES FROM SATURATED FAT	DIETARY GUIDELINE FOR FAT
Age	Age	Age
Awareness of the Link Between Diet and Health	Body Mass Index	Awareness of the Link Between Diet and Health
Body Mass Index	Education	Body Mass Index
Employment Status	Low-Fat Diet	Employment Status
Gender	Race	Low-Calorie Diet
Low-Fat Diet	Region	Low-Fat Diet
Race	Smoking Status	Race
Region	Urbanization	Region
Smoking Status	Vegetarian	Smoking Status
Urbanization		

R^2	.1841	.1920	.1033 (McFadden's R^2)
$\bar{R}^2$	.1693	.1773	(71.13%) (Prediction-Success Ratio)
n	5026	5026	5026

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Technical Report

by

Oral Capps, Jr.

November 1999

Predictive Ability of the Avoidance-Modification-Substitution-Replacement Model in Assessing Fat Intake

Background

Over the past two decades consumers have become increasingly aware of health risks associated with a diet high in fat. Consumers appear to have altered their dietary behavior in an attempt to reduce fat intake (Enns, Goldman, and Cook, 1997). For example, consumption of skim milk has increased by 250 percent since 1976 while consumption of whole milk has decreased by 50 percent over the same time period (*Food Consumption, Prices and Expenditures*, 1996). The number of new products introduced with reduced fat or low fat claims increased 208% from 1988 to 1993 (Rose). While these examples indicate consumers are altering their dietary behavior, it is not clear whether dietary changes have been most effective in actually reducing overall fat intake in individual diets.

Kristal, *et al.*(1990,1992), developed 18-item and 21-item questionnaires, based on an anthropological theory of dietary change proposed by Jerome, to assess four dimensions of dietary behavior: (1) excluding high-fat ingredients or preparation techniques; (2) modifying high-fat foods; (3) substituting specially manufactured low-fat foods for their higher-fat counterparts; and (4) replacing high-fat foods with low-fat alternatives. Examples of <u>exclusion</u>, or <u>avoidance</u> are not eating meat or not seasoning cooked vegetables with butter. <u>Modification</u> describes altering commonly available foods to be lower in fat, for example, removing skin from chicken. <u>Substitution</u> describes the pattern of maintaining one's usual structure of cuisine, but using specially manufactured products, e.g. skim milk or low-fat salad dressing. <u>Replacement</u> describes changes in cuisine, for example, eating fresh fruit for dessert.

Factor analysis was used by Kristal, *et al.* (1990, 1992), to confirm these scales of dietary assessment. Correlations with percent of calories from fat ranged from 0.34 to 0.57. In multiple regression models, the R^2 (goodness-of-fit) statistic using the aforementioned scales as well as other factors such as age, income, education, height, and weight, to predict percent of calories from fat was 0.47. Thus, the findings of Kristal, *et al.*, support the validity of the theoretical model of dietary patterns related to fat intake. Changes in fat intake were estimated using food frequency questionnaires (FFQs). A limitation of the research conducted by Kristal, *et al.*, is that their samples included only women, ages 45 to 69, from three areas -- Cincinnati, Houston, and Seattle.

Objective

With the use of the 1994-96 Diet Health and Knowledge Survey (DHKS) and the Continuing Survey of Food Intake for Individuals (CSFII), our principal objective is to ascertain the predictive ability of the previously discussed Avoidance-Modification-Substitution-Replacement (AMSR) model in the assessment of fat intake. That is, we wish to ascertain whether or not the dimensions of avoidance (exclusion), replacement, substitution, and modification are useful constructs for describing patterns regarding fat intake. From this analysis, we can identify the set of questions with the most explanatory power or predictive validity regarding fat intake. With this information, it may be possible to reduce the number of

questions that are asked on the DHKS about dietary behaviors related to fat intake. Importantly, the use of the DHKS and CSFII circumvents the aforementioned limitations of the research conducted by Kristal, *et al.*

Methodology

Data on dietary behavior from the DHKS can be linked to data on fat intake for the same individual from the CSFII. For most DHKS respondents, the CSFII provides 2 independent days of fat intake data. DHKS respondents were randomly selected from among those individuals 20 years and older who completed a Day 1 intake in the CSFII.

We take as a starting point or as given, the four dimensions of dietary behavior (avoidance; modification; substitution; and replacement) as developed and implemented by Kristal, *et al.* That is, we do not attempt to confirm via factor analysis this model using the data from the DHKS and CSFII. As exhibited in Table 1, we group the 19 behavioral questions on the 1994-96 DHKS related to fat according to avoidance, modification, substitution, and replacement. These questions correspond to numbers 26-37 on the 1994-96 DHKS. Question 26f pertains to replacement; questions 26a, 26b, 26c, 26d, 26e, and 26g pertain to substitution; questions 30, 31, and 36 deal with modification; and questions 27, 28, 29, 32, 33a, 33b, 34, 35, and 37 deal with avoidance. With this grouping, there are 162 (9x3x6x1) possible combinations of questions which deal with dimensions of dietary behavior. Each combination includes four questions, with one question from each type of behavior category-one avoidance question, one modification question, one substitution question, and one replacement question. With this grouping, we may determine which AMSR combination best correlates with fat intake. Alternatively, we also analyze all queries taken together to determine the best set of AMSR questions relating to fat intake.

Table 1. Grouping of Behavioral Questions on the 1994-96 DHKS Related to Fat According to Avoidance, Modification, Substitution, and Replacement.

Classification for Questions:

A=Avoidance
M=Modification
S=Substitution
R=Replacement

26. Now think about the foods you eat. Would you say you always, sometimes, rarely, or never (HABIT)?

S a. Eat lower-fat luncheon meats <u>instead</u> of regular luncheon meats?

S b. Use skim or 1% milk <u>instead</u> of 2% or whole milk?

S c. Eat special, low-fat cheeses, when you eat cheese?

S d. Eat ice milk, frozen yogurt, or sherbert <u>instead</u> of ice cream?

S e. Use low-calorie <u>instead</u> of regular salad dressing?

R f. Have fruit for dessert when you eat dessert?

S g. Eat fish or poultry <u>instead</u> of meat?

A 27. When you eat baked or boiled potatoes, how often do you add butter, margarine, or sour cream?

always (almost always)	1
sometimes	2
rarely	3
never	4
do not eat baked or boiled potatoes	5

A 28. When you eat other cooked vegetables, do you always, sometimes, rarely, or never eat them with butter or margarine added?

always (almost always)	1
sometimes	2
rarely	3
never	4
do not eat cooked vegetables	5

A 29. When you eat other cooked vegetables, do you always, sometimes, rarely, or never eat them with cheese or another creamy sauce added?

always (almost always)	1
sometimes	2
rarely	3
never	4

M 30. When you eat chicken, do you always, sometimes, rarely, or never eat it fried?

always (almost always)	1
sometimes	2
rarely	3
never	4
do not eat chicken	5

M 31. When you eat chicken, do you always, sometimes, rarely, or never remove the skin?

always (almost always)	1
sometimes	2
rarely	3
never	4

A 32. Would you describe the amount of butter or margarine you usually spread on breads and muffins as...

none	1
light	2
moderate, or	3
generous?	4

A 33(a): About how many times a week do you eat bakery products like cakes, cookies, or donuts?

less than once a week/never	1
1-3	2
4-6	3
7 or more	4

A 33(b). About how many times in a week do you eat chips, such as potato or corn chips?

less than once a week/never	1
1-3	2
4-6	3
7 or more	4

A 34. At your main meal, about how many times in a week do you eat beef, pork or lamb?

less than once a week/never	1
1-2	2
3-4	3
5-7	4
do not eat meat	5

A 35. When you eat meat (beef, pork, or lamb) do you usually eat...

small,	1
medium, or	2
large portions?	3
do not eat meat	5

M 36. When you eat meat and there is visible fat, do you trim the fat always, sometimes, rarely, or never?

always (almost always)	1
sometimes	2
rarely	3
never	4
never eat meat with visible fat	5

A 37. How many eggs (plain eggs, not egg substitutes or eggs in mixed dishes or baked goods) do you usually eat in a week?

less than 1/none	1
1-2	2
3-4	3
5 or more	4

Next, it is necessary to develop multiple regression models to evaluate the association of each of the fat-related dietary habits with fat intake. The dependent variable in these models may be characterized by one of three ways:

(a) the percentage of calories from all fats (% CFFAT);

(b) whether an individual has a total fat intake level no more than 30 percent of total caloric intake, the dietary guideline for fat (FATGUIDE); or

(c) the percentage of calories from saturated fat (% CFSFAT).

Previous studies (Putler and Frazao (1994); Haines, Guilkey, and Popkin (1988); Nayga (1994)) demonstrate the importance of particular factors in explaining differences in fat intake: (1) body mass index; (2) level of exercise; (3) special dietary behavior (whether or not an individual is on a low-fat or low-calorie diet or whether or not an individual is a vegetarian); (4) residence (region and/or urbanization); (5) employment status of female head; (6) reported day (of the week) of intake; (7) participation in public assistance or government programs (e.g., WIC or Food Stamp Program); (8) perceived health status; (9) seasonality; (10) smoking status; (11) race and origin; (12) education level; (13) gender; (14) income or poverty category; (15) age; (16) pregnancy or lactating status; and (17) household size.

Given the importance of these factors documented from previous research efforts, we employ them as the right-hand side variables in the multiple regression models. As exhibited in Figure 1, these exogenous factors may be broadly classified as: (1) dimensions of dietary behavior; (2) demographic factors; (3) characteristics of individuals; and (4) other factors. By addressing potential determinants of fat intake, we minimize the confounding of the dimensions of dietary behavior with demographic factors, characteristics of individuals, and other factors.

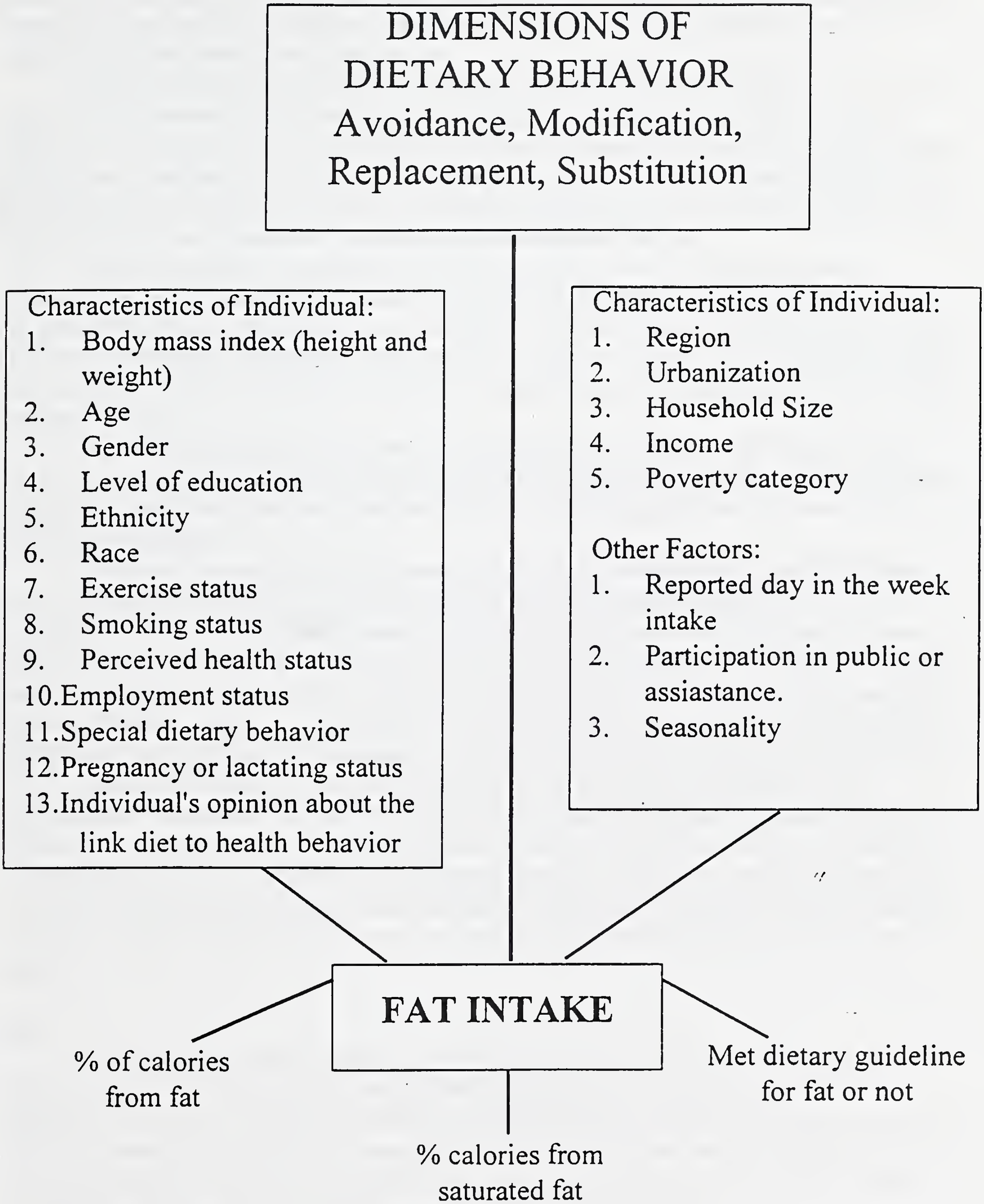
Mathematically then, we may write the multiple regression models as follows:

(1) %CFFAT = f_1(dimensions of dietary behavior; characteristics of individuals; demographic factors; other factors), where %CFFAT is the percentage of calories from fat

(2) %CFSFAT = f_2(dimensions of dietary behavior; characteristics of individuals; demographic factors; other factors), where %CFSFAT is the percentage of calories from saturated fat

(3) FATGUIDE= f_3(dimensions of dietary behavior; characteristics of individuals; demographic factors; other factors), where FATGUIDE is 1, if individual has a total fat intake level $\leq$ 30 percent of total caloric intake; 0 otherwise

Figure 1. Framework for Analysis



Diet-disease awareness, according to Putler and Frazao, is a function of age, gender, education level, ethnicity, race, income and smoking status. These variables are incorporated directly in equations (1)-(3). Unlike Putler and Frazao, we do not estimate the predicted probability of diet-disease awareness for fat.

Previous surveys (Food Marketing Institute, 1990; Gallup, 1990) indicate that men are typically less interested in diet and health issues than are women. Racial differences may influence diet-disease awareness because of differences in media habits among different racial groups; since newspapers and magazines are the primary way that diet-disease information has been conveyed to consumers, it is likely that blacks, Hispanics, and other races may have lower levels of diet-disease awareness compared with non-Hispanic whites.

Also, the number of media items read increases with years of formal education. Consequently, we hypothesize that access to diet-disease information will be higher among individuals with higher education levels. Moreover, a smoker is likely to place a lower value on their own health than a demographically similar non-smoker. Further, Putler and Frazao argue that it is likely that the probability of awareness would first rise after the age of 18, reach a peak and then decline.

With regard to income, Putler and Frazao argue that individuals with higher income levels are more likely to be aware of diet-disease relationships. Importantly, they also find that individuals who refuse to answer questions about income are less likely to be aware of diet-disease relationships.

The questions associated with dimensions of dietary behavior as proposed by Kristal, *et al.*, are typically recorded as 1, 2, 3, or 4. To operationalize these variables in our models (equations (1)-(3)), we use dummy variables. To illustrate, in question 29, respondents were asked if they always, sometimes, rarely, or never eat cooked vegetables with cheese or another creamy sauce added. Indicator (zero-one) i.e. dummy variables were constructed corresponding to these qualitative choices. To ascertain if the dimensions of dietary behavior proposed by Kristal, *et al.* are significant determinants of fat intake, we perform a series of F-tests or X^2-tests.

To judge the best set of questions to use in future surveys, for each of the 162 combinations, we consider whether or not we get statistical significance from the F-tests or X^2-tests and we consider the magnitude of the R2 statistic from the multiple regressions model. Given that equation (3) corresponds to a discrete dependent variable, we employ logit analysis. To judge the best set of questions to use in equation (3) regarding meeting the dietary guideline for fat, we employ a series of X^2-tests and we consider the magnitude of the log-likelihood function.

Data

The sample of interest includes only DHKS respondents who provided 2 days of intake data from the CSFII, 1836 observations in 1994, 1936 observations in 1995, and 1877 observations in 1996. For the years 1994-96, the total number of observations for this analysis is 5,649. We report the frequencies of responses associated with questions 26(a)-26(g), 27, 28, 29, 30, 31, 32, 33(a)-33(b), 34, 35, 36, and 37 from the DHKS for 1994, 1995, and 1996. The frequencies are not weighted to be representative of the U.S. population.

Avoidance:

Question 27: When you eat baked or boiled potatoes, how often do you add butter, margarine, or sour cream?

		1994		1995		1996	
always (almost always)	1	1011	(55.1%)	1052	(54.3%)	1105	(58.9%)
sometimes	2	476	(25.9%)	513	(26.5%)	439	(23.4%)
rarely	3	156	(8.5%)	168	(8.7%)	164	(8.7%)
never	4	154	(8.4%)	176	(9.1%)	149	(7.9%)
do not eat baked or boiled potatoes	5	25	(1.4%)	25	(1.3%)	19	(1.0%)
don't know	8	1	(0.1%)	0	(0.0%)	0	(0.0%)
not ascertained	9	13	(0.7%)	2	(0.1%)	1	(0.1%)

Four out of five respondents always or sometimes add butter, margarine, or sour cream to baked or boiled potatoes.

Question 28: When you eat other cooked vegetables, do you always, sometimes, rarely, or never eat them with butter or margarine added?

		1994		1995		1996	
always (almost always)	1	404	(22.0%)	427	(22.1%)	431	(23.0%)
sometimes	2	736	(40.1%)	729	(37.7%)	682	(36.3%)
rarely	3	331	(18.0%)	373	(19.3%)	410	(21.8%)
never	4	352	(19.2%)	401	(20.7%)	346	(18.4%)
do not eat baked or boiled potatoes	5	7	(0.4%)	2	(0.1%)	7	(0.4%)
don't know	8	3	(0.2%)	2	(0.1%)	0	(0.0%)
not ascertained	9	3	(0.2%)	2	(0.1%)	1	(0.1%)

Three out of five eat other cooked vegetables with butter or margarine added. Two out five rarely or never adds butter or margarine to other cooked vegetables.

Question 29: When you eat other cooked vegetables, do you always, sometimes, rarely, or never eat them with cheese or another creamy sauce added?

		1994		1995		1996	
always (almost always)	1	42	(2.3%)	38	(2.0%)	52	(2.8%)
sometimes	2	574	(31.4%)	558	(28.9%)	550	(29.4%)
rarely	3	609	(33.3%)	671	(34.7%)	685	(36.6%)
never	4	596	(32.6%)	664	(34.3%)	582	(31.1%)
do not eat baked or boiled potatoes	5	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	7	(0.4%)	3	(0.2%)	1	(0.1%)
not ascertained (blank)	-99999	7	(0.4%)	2	(0.2%)	7	(0.4%)

Two-thirds of respondents rarely or never eat other cooked vegetables with cheese or another creamy sauce added. However, three out of ten respondents sometimes eat other cooked vegetables with cheese or creamy sauce added.

Question 32: Would you describe the amount of butter or margarine you usually spread on breads and muffins as:

		1994		1995		1996	
none	1	215	(11.7%)	212	(11.0%)	202	(10.8%)
light	2	796	(43.3%)	893	(46.1%)	805	(42.9%)
moderate, or	3	616	(33.5%)	649	(33.5%)	669	(35.6%)
generous?	4	204	(11.1%)	179	(9.2%)	198	(10.5%)
don't know	8	0	(0.0%)	0	(0.0%)	1	(0.1%)
not ascertained	9	5	(0.3%)	3	(0.2%)	2	(0.1%)

Seventy-five to eighty percent of respondents describe amounts of butter or margarine they spread on breads or muffins as light or moderate. Only 10 percent say they apply generous amounts of butter or margarine on breads or muffins.

Question 33(a): About how many times a week do you eat bakery products like cakes, cookies, or donuts?

		1994		1995		1996	
less than once a week/never	1	693	(37.7%)	744	(38.4%)	631	(33.6%)
1-3	2	785	(42.7%)	818	(42.3%)	847	(45.1%)
4-6	3	220	(12.0%)	226	(11.7%)	268	(14.3%)
7 or more	4	135	(7.3%)	144	(7.4%)	130	(6.9%)
not ascertained	9	3	(0.2%)	4	(0.2%)	1	(0.1%)

Slightly more than 40 percent of the survey respondents eat bakery products 1 to 3 times a week, and slightly less than 40 percent eat bakery products less than once a week.

Question 33(b): About how many times a week do you eat chips, such as potato or corn chips?

		1994		1995		1996	
less than once a week/never	1	917	(49.9%)	1023	(52.8%)	857	(45.7%)
1-3	2	680	(37.0%)	697	(36.0%)	767	(40.9%)
4-6	3	125	(6.8%)	140	(7.2%)	183	(9.7%)
7 or more	4	88	(4.8%)	57	(2.9%)	57	(3.0%)
not ascertained	9	26	(1.4%)	19	(1.0%)	13	(0.7%)

About half the respondents say they eat chips less than once a week. About 40 percent say they eat chips 1 to 3 times a week.

Question 34: At your main meal, about how many times in a week do you eat beef, pork or lamb?

		1994		1995		1996	
less than once a week/never	1	261	(14.2%)	286	(14.8%)	251	(13.4%)
1-2	2	686	(37.3%)	742	(38.3%)	636	(33.9%)
3-4	3	536	(29.2%)	594	(30.7%)	645	(34.4%)
5-7	4	296	(16.1%)	270	(13.9%)	298	(15.9%)
do not eat meat	5	51	(2.8%)	40	(2.1%)	43	(2.3%)
don't know	8	1	(0.1%)	1	(0.1%)	0	(0.0%)
not ascertained	9	5	(0.3%)	3	(0.2%)	4	(0.2%)

Two-thirds of the survey respondents eat beef, pork, or lamb 1 to 4 times a week at their main meal. Roughly 15 percent eat beef, pork, or lamb less than once a week. About 15 percent eat beef, pork, or lamb 5 to 7 times a week. Two to three percent do not eat meat at all.

Question 35: When you eat meat (beef, pork, or lamb) do you usually eat...

		1994		1995		1996	
small,	1	612	(33.3%)	688	(35.5%)	590	(31.4%)
medium, or	2	962	(52.4%)	987	(51.0%)	1019	(54.3%)
large portions?	3	192	(10.5%)	197	(10.2%)	215	(11.4%)
do not eat meat	5	12	(0.7%)	21	(1.1%)	7	(0.4%)
don't know	8	2	(0.1%)	0	(0.0%)	1	(0.1%)
not ascertained	9	5	(0.3%)	3	(0.1%)	2	(0.1%)
not applicable (blank)	-99999	51	(2.8%)	40	(2.0%)	43	(2.3%)

Half of the survey respondents say they eat medium portions of beef, pork, or lamb, while one-third say they eat small portions. Only about 10 percent say they eat large portions of beef, pork, or lamb.

Question 37: How many eggs (plain eggs, not egg substitutes or eggs in mixed dishes or baked goods) do you usually eat in a week?

		1994		1995		1996	
less than 1/none	1	595	(32.4%)	594	(30.7%)	575	(30.6%)
1-2	2	648	(35.3%)	700	(36.2%)	657	(35.0%)
3-4	3	370	(20.2%)	407	(21.0%)	436	(23.2%)
5 or more	4	218	(11.9%)	232	(12.0%)	208	(11.1%)
don't know	8	1	(0.1%)	0	(0.0%)	0	(0.0%)
not ascertained	9	4	(0.2%)	3	(0.2%)	1	(0.1%)

About one-third of the respondents eat less than 1 egg per week, while another third eat 1 to 2 eggs per week. About 20 percent of the respondents eat 3 to 4 eggs per week. Slightly more than 10 percent eat 5 or more eggs per week.

Modification:

Question 30: When you eat chicken, do you always, sometimes, rarely, or never eat it fried?

		1994		1995		1996	
always (almost always)	1	159	(8.7%)	176	(9.1%)	171	(9.1%)
sometimes	2	824	(44.9%)	846	(43.7%)	810	(43.2%)
rarely	3	511	(27.9%)	517	(26.7%)	557	(29.7%)
never	4	304	(16.6%)	350	(18.1%)	308	(16.4%)
do not eat chicken	5	34	(1.9%)	44	(2.3%)	29	(1.5%)
not ascertained	9	4	(0.2%)	3	(0.2%)	2	(0.1%)

About half the respondents always or sometimes eat chicken fried. Roughly 45 percent rarely or never do.

Question 31: When you eat chicken, do you always, sometimes, rarely, or never remove the skin?

		1994		1995		1996	
always (almost always)	1	853	(46.5%)	907	(46.8%)	816	(43.5%)
sometimes	2	496	(27.0%)	533	(27.5%)	552	(29.4%)
rarely	3	136	(7.4%)	145	(7.5%)	173	(9.2%)
never	4	312	(17.0%)	304	(15.7%)	306	(16.3%)
don't know	8	1	(0.1%)	0	(0.0%)	0	(0.0%)
not ascertained	9	4	(0.2%)	3	(0.1%)	1	(0.1%)
not applicable (blank)	-99999	34	(1.9%)	44	(2.3%)	29	(1.5%)

Nearly 75 percent always or sometimes remove the skin when they eat chicken. About one-sixth however, never remove the skin.

Question 36: When you eat meat and there is visible fat, do you trim the fat always, sometimes, rarely, or never?

		1994		1995		1996	
always (almost always)	1	1215	(66.2%)	1294	(66.8%)	1228	(65.4%)
sometimes	2	369	(20.1%)	383	(19.8%)	401	(21.4%)
rarely	3	60	(3.3%)	88	(4.5%)	79	(4.2%)
never	4	120	(6.5%)	94	(5.0%)	96	(5.1%)
never meat with visible fat	5	5	(0.3%)	14	(0.7%)	22	(1.2%)
not ascertained	9	4	(0.2%)	2	(0.1%)	1	(0.1%)
not applicable (blank)	-99999	63	(3.4%)	61	(3.1%)	50	(2.6%)

About two-thirds of the respondents always or almost always trim the fat when they eat meat. About 20 percent sometimes trim the fat. Five to six percent though never trim the fat when they eat meat.

Substitution:

Question 26(a): Do you always, sometimes, rarely or never eat lower-fat luncheon meats instead of regular luncheon meats?

		1994		1995		1996	
always (almost always)	1	385	(21.0%)	428	(22.1%)	405	(21.6%)
sometimes	2	664	(36.1%)	676	(34.9%)	634	(33.8%)
rarely	3	268	(14.6%)	251	(13.0%)	292	(15.6%)
never	4	334	(18.2%)	332	(17.1%)	331	(17.6%)
does not eat this food	5	177	(9.6%)	239	(12.3%)	209	(11.1%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	0	(0.0%)	5	(0.3%)	2	(0.1%)
not ascertained	9	7	(0.4%)	5	(0.3%)	4	(0.2%)

About 20 percent always and about a third sometimes eat lower-fat luncheon meats instead of regular luncheon meats. One third rarely or never do. Ten to twelve percent of the respondents do not eat luncheon meats.

Question 26(b): Do you always, sometimes, rarely or never use skim or 1% milk instead of 2% or whole milk?

		1994		1995		1996	
always (almost always)	1	590	(32.1%)	724	(37.4%)	674	(35.9%)
sometimes	2	273	(14.9%)	273	(14.1%)	255	(13.6%)
rarely	3	217	(11.8%)	210	(10.8%)	210	(11.2%)
never	4	702	(38.2%)	656	(33.9%)	674	(35.9%)
does not eat this food	5	49	(2.7%)	65	(3.4%)	61	(3.2%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	1	(0.1%)	1	(0.1%)	0	(0.0%)
not ascertained	9	3	(0.2%)	7	(0.4%)	3	(0.2%)

About 35 percent of survey respondents always use skim or 1% milk instead of 2% or whole milk. But nearly two-fifths of the respondents never use skim or 1% milk instead of 2% or whole milk.

Question 26(c): Do you always, sometimes, rarely, or never eat special, low-fat cheeses, when you eat cheese?

		1994		1995		1996	
always (almost always)	1	266	(14.5%)	334	(17.3%)	250	(13.3%)
sometimes	2	487	(26.5%)	471	(24.3%)	479	(25.5%)
rarely	3	318	(17.3%)	328	(16.9%)	342	(18.2%)
never	4	697	(38.0%)	699	(36.1%)	730	(38.9%)
does not eat this food	5	59	(3.2%)	94	(4.9%)	72	(3.8%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	3	(0.2%)	3	(0.2%)	1	(0.1%)
not ascertained	9	5	(0.3%)	7	(0.4%)	3	(0.2%)

About 55 percent rarely or never eat low-fat cheese when they eat cheese. But about 40 percent always or sometimes eat low-fat cheese.

Question 26(d): Do you always, sometimes, rarely, or never eat ice milk, frozen yogurt, or sherbert instead of ice cream?

		1994		1995		1996	
always (almost always)	1	327	(17.8%)	369	(19.1%)	307	(16.4%)
sometimes	2	667	(36.3%)	687	(35.5%)	687	(36.6%)
rarely	3	255	(13.9%)	263	(13.6%)	286	(15.2%)
never	4	514	(28.0%)	515	(26.6%)	511	(27.2%)
does not eat this food	5	68	(3.7%)	94	(4.9%)	82	(4.4%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	1	(0.1%)	2	(0.1%)	0	(0.0%)
not ascertained	9	3	(0.2%)	6	(0.3%)	4	(0.2%)

About 40 percent rarely or never eat ice milk, frozen yogurt, or sherbert instead of ice cream. However, nearly one-fifth of the respondents always eat these foods in lieu of ice cream. Further, slightly more than one-third sometimes eat these foods instead of ice cream.

Question 26(e): Do you always, sometimes, rarely, or never use low-calorie instead of regular salad dressing?

		1994		1995		1996	
always (almost always)	1	480	(26.1%)	543	(28.0%)	506	(27.0%)
sometimes	2	582	(31.7%)	600	(31.0%)	583	(31.1%)
rarely	3	204	(11.1%)	186	(9.6%)	195	(10.4%)
never	4	486	(26.5%)	480	(24.8%)	492	(26.2%)
does not eat this food	5	79	(4.3%)	115	(5.9%)	92	(4.9%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	0	(0.0%)	6	(0.3%)	8	(0.4%)
not ascertained	9	4	(0.2%)	6	(0.3%)	1	(0.1%)

Nearly 60 percent always or sometimes use low-calorie salad dressing in lieu of regular dressing. But slightly more than one-third of survey respondents rarely or never do. Five to six percent do not use salad dressing at all.

Question26(g): Do you always, sometimes, rarely or never eat fish or poultry instead of meat?

		1994		1995		1996	
always (almost always)	1	346	(18.8%)	321	(16.6%)	325	(17.3%)
sometimes	2	1213	(66.1%)	1323	(68.3%)	1262	(67.2%)
rarely	3	170	(9.3%)	182	(9.4%)	185	(9.9%)
never	4	86	(4.7%)	87	(4.5%)	87	(4.6%)
does not eat this food	5	15	(0.8%)	16	(0.8%)	14	(0.7%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	0	(0.0%)	1	(0.1%)	0	(0.0%)
not ascertained	9	5	(0.3%)	6	(0.3%)	4	(0.2%)

About 85 percent of the respondents always or sometimes eat fish or poultry instead of meat. About 1 percent do not eat fish or poultry at all.

Replacement:

Question 26(f): Do you always, sometimes, rarely or never have fruit for dessert when you eat dessert?

		1994		1995		1996	
always (almost always)	1	311	(16.9%)	308	(15.9%)	288	(15.3%)
sometimes	2	1095	(59.6%)	1173	(60.6%)	1131	(60.3%)
rarely	3	261	(14.2%)	264	(13.6%)	280	(14.9%)
never	4	147	(8.0%)	162	(8.4%)	153	(8.2%)
does not eat this food	5	15	(0.8%)	22	(1.1%)	23	(1.2%)
refused	7	1	(0.1%)	0	(0.0%)	0	(0.0%)
don't know	8	0	(0.0%)	1	(0.1%)	0	(0.0%)
not ascertained	9	6	(0.3%)	6	(0.3%)	2	(0.1%)

About three-fourths of respondents always or sometimes have fruit for dessert when they eat dessert.

Additional Right-Hand Side Variables:

The list of right-hand side variables in the regression models, besides the previously discussed dimensions of dietary behavior, are organized by demographic factors; characteristics of individuals; and other factors. Demographic factors include the following: (1) region; (2) urbanization; (3) household size; (4) income; and (5) poverty category. Characteristics of individuals include the following: (1) gender; (2) race; (3) origin/ethnicity; (4) age; (5) education; (6) employment status; (7) health status; (8) exercise status; (9) smoking status; (10) height; (11) weight; (12) body mass index; (13) special dietary status (low-fat diet; low-calorie diet; vegetarian); and (14) pregnant/lactating status. Other factors include the following: (1) participation status in Food Stamp Program; (2) participation status in WIC Program; (3) seasonality; (4) day of week; and (5) link of diet to health.

We also report in Table 2 the frequencies of variables which correspond to demographic factors; characteristics of individuals; and other factors. Percentage of poverty threshold (POVCAT) is used in lieu of income and household size. The variable pertaining to the WIC program is not used as a right-hand side variable in our analysis. Only six or seven survey respondents participated in the WIC program over the 1994-96 period. Body mass index is used as an exogenous factor in lieu of height and weight. If seasons differ from day one to day two of intakes (only occurs about 7% of the time), we use the season from day one. Weekdays

correspond to Monday through Friday. Given that many of these right-hand side variables are qualitative, they enter equations (1)-(3) as dummy variables.

Table 2. **Frequencies of Variables Which Correspond to Demographic Factors, Characteristics of Individuals, and Other Factors.**

Demographic Factors

REGION		1994		1995		1996	
Northeast	1	350	(19.1%)	386	(19.9%)	341	(18.2%)
Midwest	2	496	(27.0%)	459	(23.7%)	466	(24.8%)
South (Base)	3	631	(34.4%)	725	(37.4%)	648	(34.5%)
West	4	359	(19.6%)	366	(18.9%)	422	(22.5%)
URBANIZATION							
MSA, central city (Base)	1	606	(33.0%)	528	(27.3%)	539	(28.7%)
MSA, outside central city	2	741	(40.4%)	907	(46.8%)	822	(43.8%)
Non MSA	3	489	(26.6%)	501	(25.9%)	516	(27.5%)
HOUSEHOLD SIZE							
	1	401	(21.8%)	483	(24.9%)	411	(21.9%)
	2	652	(35.5%)	749	(38.7%)	685	(36.5%)
	3	323	(17.6%)	302	(15.6%)	302	(16.1%)
	4	246	(13.4%)	232	(12.0%)	273	(14.5%)
	5	140	(7.6%)	99	(5.1%)	115	(6.1%)
	6	41	(2.2%)	35	(1.8%)	58	(3.1%)
	7	16	(0.9%)	25	(1.3%)	23	(1.2%)
	8	10	(0.5%)	6	(0.3%)	6	(0.3%)
	9	6	(0.3%)	3	(0.2%)	2	(0.1%)
	10	0	(0.0%)	0	(0.0%)	1	(0.1%)
	11	0	(0.0%)	1	(0.1%)	1	(0.1%)
	14	1	(0.1%)	0	(0.0%)	0	(0.0%)
	16	0	(0.0%)	1	(0.1%)	0	(0.0%)

INCOME:

	1994	1995	1996
# observations $0	23	11	7
# observations >$100,000	71	75	123
Mean	$32,700	$34,275	$37,650
Median	$25,000	$28,000	$30,000

POVCAT (percent of poverty threshold)		1994		1995		1996	
0 to 130% (Base)	1	507	(27.6%)	472	(24.4%)	472	(25.1%)
131% to 350%	2	728	(39.7%)	777	(40.1%)	671	(35.7%)
Over 350%	3	601	(32.7%)	687	(35.5%)	734	(39.1%)

Characteristics of Individuals

GENDER							
Male	1	889	(48.4%)	973	(50.3%)	984	(52.4%)
Female (Base)	2	947	(51.6%)	963	(49.7%)	893	(47.6%)

RACE							
White (Base)	1	1485	(80.9%)	1612	(83.3%)	1520	(81.0%)
Black	2	227	(12.4%)	217	(11.2%)	218	(11.6%)
Asian, Pacific	3	31	(1.7%)	28	(1.4%)	35	(1.9%)
Native American	4	16	(0.9%)	11	(0.6%)	11	(0.6%)
Other	5	77	(4.2%)	68	(3.5%)	93	(5.0%)

ORIGIN/ETHNICITY							
Mexican	1	69	(3.8%)	51	(2.6%)	83	(4.4%)
Puerto Rican (Base)	2	16	(0.9%)	21	(1.1%)	13	(0.7%)
Cuban	3	5	(0.3%)	6	(0.3%)	1	(0.1%)
Other Hispanic	4	69	(3.8%)	67	(3.5%)	55	(2.9%)
Non-Hispanic	5	1677	(91.3%)	1791	(92.5%)	1725	(91.9%)

AGE		1994		1995		1996	
		20 to 90 inclusive		20 to 90 inclusive		20 to 90 inclusive	
		Mean 49		Mean 54		Mean 48	
		Median 49		Median 55		Median 48	

EDUCATION							
Never attended school or kindergarten only	0	5		7		5	
	1	2		1		0	
	2	14		2		2	
	3	15		9		9	
	4	10		18		11	
	5	13		19		15	
Less than high school (Base)	6	30	(22.8%)	39	(22.1%)	30	(19.2%)
	7	26		37		30	
	8	82		79		66	
	9	60		54		61	
	10	76		82		52	
	11	85		80		79	
High school or GED	12	635	(34.6%)	674	(34.8%)	607	(32.3%)
1 year of college	13	132		111		144	
2 years of college	14	162		207		186	
3 years of college	15	81	(41.2%)	77	(42.5%)	72	(47.3%)
4 years of college	16	185		204		224	
5 or more years of college	17	196		224		262	
not asked question	93	2		0		1	
refused	97	1	(1.5%)	0	(0.7%)	0	(1.2%)
don't know	98	4		5		4	
not ascertained	99	20		7		17	

EMPLOYMENT STATUS		1994		1995		1996	
Employed full-time	1	793	(43.2%)	760	(39.3%)	853	(45.4%)
Employed part-time	2	205	(11.2%)	217	(11.2%)	232	(12.4%)
Employed, not at work last week	3	52	(2.8%)	60	(3.1%)	67	(3.6%)
Not employed (Base)	4	761	(41.4%)	882	(45.6%)	699	(37.2%)
Indeterminable	5	25	(1.4%)	17	(0.8%)	26	(1.4%)

HEALTH STATUS							
Excellent	1	370		375		464	
Very good	2	574	(82.0%)	580	(80.8%)	577	(84.9%)
Good	3	562		609		553	
Fair (Base)	4	257		273		216	
Poor	5	70	(17.8%)	95	(19.0%)	57	(14.5%)
Don't know	8	2	(0.1%)	2	(0.1%)	3	(0.2%)
Not ascertained	9	1	(0.1%)	2	(0.1%)	7	(0.4%)

EXERCISE STATUS							
Daily	1	370		371		394	
5-6 times/week	2	114		114		135	
2-4 times/week	3	401	(48.2%)	397	(45.6%)	421	(50.6%)
Once/week	4	134		143		138	
1-3 times/week	5	94	(12.4%)	83	(11.7%)	93	(12.3%)
Rarely or never (Base)	6	716	(39.0%)	821	(42.4%)	689	(36.7%)
Not ascertained	9	7		7		7	

SMOKING STATUS		1994		1995		1996	
Not applicable (never smoked)		865	(47.1%)	896	(46.3%)	905	(48.2%)
Yes (smoking now)	1	472	(25.7%)	493	(25.5%)	488	(26.0%)
No (smoked, but not now)	2	498	(27.1%)	547	(28.2%)	483	(25.7%)
Not ascertained	9	1	(0.1%)	0	(0.0%)	1	(0.1%)

HGT_SP (HEIGHT IN INCHES)			
Blank	13	8	16
Mean	66.82	66.89	67.12
Median	67	67	67
Minimum	56	49	48
Maximum	80	79	79

WGT_SP (WEIGHT IN POUNDS)			
Blank	25	42	27
Mean	168.27	170.42	170.59
Median	165	165	168
Minimum	80	80	86
Maximum	388	460	350

BMI_SP (BMI)			
Blank	35	46	38
Mean	26.37	26.67	26.56
Median	26	26	26
Minimum	16	16	15
Maximum	64	70	59

DT02 (Low-fat Diet)		1994		1995		1996	
Yes	1	181	(9.8%)	195	(10.1%)	139	(7.4%)
No (Base)	2	1654	(90.1%)	1741	(89.9%)	1738	(92.6%)
Not ascertained	9	1	(0.1%)	0	(0.0%)	0	(0.0%)

DT01 (Low-Calorie Diet)							
Yes	1	131	(7.1%)	124	(6.4%)	101	(5.4%)
No (Base)	2	1704	(92.8%)	1812	(93.6%)	1776	(94.6%)
Not ascertained	9	1	(0.1%)	0	(0.0%)	0	(0.0%)

VEGET (Vegetarian)							
Yes	1	59	(3.2%)	59	(3.0%)	53	(2.8%)
No (Base)	2	1774	(96.6%)	1877	(97.0%)	1819	(96.9%)
Don't know	8	2	(0.1%)	0	(0.0%)	0	(0.0%)
Not ascertained	9	1	(0.1%)	0	(0.0%)	5	(0.3%)

PL_STAT (Pregnant/Lactating status)							
Pregnant	1	12	(0.7%)	9	(0.5%)	13	(0.7%)
Lactating	2	6	(0.3%)	7	(0.4%)	4	(0.2%)
Not pregnant or lactating	4	565	(30.8%)	472	(24.4%)	566	(30.2%)
Not female (Base)	5	1253	(68.2%)	1448	(74.8%)	1293	(68.9%)

Other Factors

SEASONALITY		1994		1995		1996	
Winter (January, Feburary, March)		428	(23.3%)	443	(22.9%)	396	(21.1%)
Spring (April, May, June)		452	(24.6%)	468	(24.2%)	530	(28.2%)
Summer (July, August, September)		494	(26.9%)	532	(27.5%)	552	(29.4%)
Fall (October, November, December) (Base)		462	(29.2%)	493	(25.5%)	399	(21.3%)
DAY OF WEEK							
2 weekdays		1077	(58.7%)	1116	(57.6%)	1103	(58.8%)
2 weekends (Base)		93	(5.1%)	172	(8.9%)	151	(8.0%)
1 weekday; 1 weedend		666	(36.3%)	648	(33.5%)	623	(33.2%)
KQ2_F (What you eat can make a big difference in your chance of getting a disease, like heart disease or cancer)							
Strongly disagree	1	71	(3.9%)	68	(3.5%)	58	(3.1%)
Somewhat disagree	2	115	(6.3%)	133	(6.9%)	132	(7.0%)
Somewhat agree	3	547	(29.8%)	551	(28.5%)	528	(28.1%)
Strongly agree	4	1088	(59.3%)	1170	(60.4%)	1144	(60.9%)
Don't know or not ascertained		15	(0.8%)	14	(0.8%)	15	(0.8%)
FS_RCV12 (Food Stamps received)							
Yes	1	212	(11.5%)	177	(9.1%)	208	(11.1%)
No (Base)	2	1609	(87.6%)	1753	(90.5%)	1656	(88.2%)
Refused	7	3	(0.2%)	2	(0.1%)	2	(0.1%)
Don't know	8	2	(0.1%)	2	(0.1%)	1	(0.1%)
Not ascertained	9	10	(0.5%)	2	(0.1%)	10	(0.5%)

WIC_YN (WIC)		1994		1995		1996	
Yes	1	6	(0.3%)	7	(0.4%)	7	(0.4%)
No	2	1814	(98.8%)	1906	(98.5%)	1854	(98.8%)
Don't know	8	1	(0.1%)	0	(0.0%)	1	(0.1%)
Not ascertained	9	15	(0.8%)	23	(1.2%)	15	(0.8%)

Endogenous Variables

Descriptive statistics of the endogenous variables in this analysis are exhibited in Table 3. On average, the percentage of calories from fat is slightly more than 33 and the percentage of calories from saturated fat is between 11 and 13. Roughly 30 percent of respondents (561 out of 1836) in the Survey met the dietary guideline for fat in 1994; 34 percent met the dietary guideline for fat in 1995; and 36 percent met the dietary guideline for fat in 1996. Interestingly, the percentage of individuals meeting the guidelines for total fat increased each year.

Also included in Table 3 are descriptive statistics for food energy; total fat; monounsaturated fat; saturated fat; and polyunsaturated fat. The average intake of food energy ranges from 1895 to 1986 kcal. The mean level of total fat intake is about 73 grams; the average intake of saturated fat is 24 grams; the mean intake of polyunsaturated fat is 15 grams; and the average intake of monounsaturated fat is 28 grams.

Table 3. Descriptive Statistics of Endogenous Variables.

	MEAN	STDEV	MIN	MAX
PCTFAT(%)				
Percentage of calories fat				
1994	33.8	7.9	8.7	58.3
1995	33.4	7.9	1.0	60.0
1996	33.2	8.1	4.0	58.0
Dietary Guideline for Total Fat				
# and % who met guideline				
1994		561	(30.6%)	
1995		664	(34.3%)	
1996		681	(36.3%)	
# and % who did not meet guideline				
1994		1275	(69.4%)	
1995		1272	(65.7%)	
1996		1196	(63.7%)	
PCTSFAT (%)				
Percentage of calories from saturated fat				
1994	11.2	3.4	1.9	59.7
1995	12.8	3.5	0.5	25.6
1996	12.7	3.5	0.8	27.4

	MEAN	MEDIAN	STDEV	MIN	MAX
ENERGY (kcal)					
Food energy					
1994	1926.19	1772.90	834.07	355.81	6679.89
1995	1895.20	1739.81	829.50	355.27	8298.77
1996	1986.36	1832.65	859.32	130.58	8368.17
TFAT (g)					
Total fat					
1994	73.08	66.44	38.30	8.34	287.22
1995	71.63	64.24	38.78	4.49	379.15
1996	74.32	67.04	39.38	4.08	348.36
MFAT (g)					
Monounsaturated fat					
1994	28.06	25.29	15.43	2.26	111.77
1995	27.51	24.30	15.38	1.73	140.52
1996	28.41	25.56	15.62	1.07	133.94
SFAT (g)					
Saturated fat					
1994	24.27	21.44	13.72	1.83	102.08
1995	23.92	20.99	14.49	0.83	159.12
1996	24.75	22.22	14.34	1.14	145.06
PFAT (g)					
Polyunsaturated fat					
1994	14.97	12.85	8.97	1.07	74.12
1995	14.52	12.60	8.60	1.31	64.42
1996	15.32	13.32	9.35	0.46	85.25

Empirical Results

We discuss the results in three stages: (1) concentration on percentage of calories from total fat; (2) concentration on percentage of calories from saturated fat; and (3) concentration on meeting or not meeting the dietary guideline for fat. Associated with each stage are findings from 162 regression models, corresponding to all combinations of avoidance, modification, substitution, and replacement questions. Details of the regression runs are exhibited in Appendices A, B, and C. Observations with incomplete information on the right-hand side variables are eliminated from the analysis. Emphasis is placed on ascertaining if the dimensions of dietary behavior (avoidance, modification, substitution, and replacement) affect fat intake, and if so, specifically which questions of the 1994-96 DHKS are most useful in predicting fat intake. As well, we center attention on identifying and assessing the importance of demographic factors, characteristics of individuals, and other factors on fat intake. The level of significance chosen for all statistical analyses is 0.05.

PERCENTAGE OF CALORIES FROM TOTAL FAT

The number of useable observations for this analysis varies from 1649 to 1674 in 1994; 1776 to 1800 in 1995; and 1696 to 1732 in 1996. The goodness-of-fit statistics (R^2) vary from .1212 to .1819. The collection of explanatory variables explains 12 to 18 percent of the variability in the percentage of calories from total fat. All combinations of avoidance, modification, substitution and replacement questions as a group are jointly significant in describing percentage of calories from total fat. On this basis, the paradigm developed by Kristal, *et al.*, is a useful construct in explaining percentage of calories from total fat.

A summary of the performance of particular questions dealing with avoidance, modification, substitution and replacement is exhibited in Table 4. Avoidance, questions 27, 28, 32, and 37 are statistically significant in <u>all</u> combinations where present. These questions correspond to behavior regarding the frequency of use of butter or margarine on potatoes, other cooked vegetables, and breads and muffins (questions 27, 28, and 32), and frequency of eating eggs (question 37). Avoidance questions 33a, 33b, and 35 are statistically significant in only 13 and 36 of 54 possible combinations. Questions 33(a) and 33(b) relate to the frequency of consumption of bakery products and chips, while question 35 relates to size of meat portion. Avoidance question 29, frequency of adding cream sauce to cooked vegetables, and avoidance question 34, frequency of eating beef, pork, or lamb as a main meal are statistically significant in all but 1 and 2 combinations, respectively.

Modification question 30 regarding frequency of eating fried chicken is significant in all combinations where present. Modification question 31, removing skin from chicken, is significant in only 85 of 162 combinations. Modification question 36, trimming visible fat from meat, is significant in 103 of 162 combinations.

Substitution questions 26b, 26c, and 26d, are statistically significant in all combinations where present. Question 26(a) is statistically significant in 80 out of 81 combinations, and question 26(e) is statistically significant in 78 of 81 combinations. However, question 26(g) is significant in 58 of 81 combinations. Eating lower-fat luncheon meats (26a); choosing milk with lower fat content (26b); eating low-fat cheese (26c); eating frozen yogurt or sherbet instead of ice

Table 4. Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Percentage of Calories from Fat.

AVOIDANCE QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
27	18/18	18/18	18/18	54/54
28	18/18	18/18	18/18	54/54
29	16/18	18/18	18/18	52/54
32	18/18	18/18	18/18	54/54
33a	0/18	13/18	0/18	13/54
33b	0/18	18/18	18/18	36/54
34	18/18	17/18	18/18	53/54
35	14/18	18/18	4/18	36/54
37	18/18	18/18	18/18	54/54

MODIFICATION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
30	54/54	54/54	54/54	162/162
31	22/54	9/54	54/54	85/162
36	47/54	50/54	6/54	103/162

SUBSTITUTION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
26a	27/27	27/27	26/27	80/81
26b	27/27	27/27	27/27	81/81
26c	27/27	27/27	27/27	81/81
26d	27/27	27/27	27/27	81/81
26e	27/27	24/27	27/27	78/81
26g	27/27	16/27	15/27	58/81

REPLACEMENT QUESTION	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
26f	25/162	79/162	150/162	254/486

Level of significance = 0.05

cream (26d); using low-calorie salad dressing instead of regular salad dressing (26e); and eating fish or poultry instead of meat (26g) are key determinants in explaining the variability in the percentage of calories from total fat.

Replacement question 26f is statistically significant in only 254 of 486 combinations. Having fruit for dessert when eating dessert typically is not a key factor in explaining the variability in the percentage of calories from total fat in many cases.

In sum, substitution questions (26a, 26b, 26c, 26d, and 26e), avoidance questions 27, 28, 29, 32, 34, and 37 and modification question 30 are most useful in describing percentage of calories from total fat. Avoidance question 33a and replacement question 26f are not useful in most cases. The remaining avoidance questions (33b and 35), modification questions (31 and 36) and substitution question 26g have limited use in explaining the variability in percentage of calories from total fat.

PERCENTAGE OF CALORIES FROM SATURATED FAT

The number of useable observations for this analysis is the same as those used in the analysis of percentage of calories from total fat. The goodness-of-fit statistics (R^2) vary from .1429 to .1971, which indicates that the models account for 14 to 20 percent of the variability in the percentage of calories from saturated fat. All combinations of avoidance, modification, substitution and replacement questions as a group are jointly significant in describing percentage of calories from saturated fat. On this basis, the paradigm developed by Kristal, *et al.*, is a useful construct in explaining percentage of calories from saturated fat.

A summary of the performance of particular questions dealing with avoidance, modification, substitution and replacement is exhibited in Table 5. Avoidance, questions 27, 28, 32, 34, and 37 are statistically significant in <u>all</u> combinations where present. These questions correspond to behavior regarding the frequency of use of butter or margarine on potatoes and other cooked vegetables, and the amount of butter or margarine spread on breads and muffins (questions 27, 28, and 32), frequency of eating beef, pork or lamb as a main meal (question 34), and frequency of eating eggs (question 37). Avoidance question 29, pertaining to frequency of adding cream sauce to cooked vegetables, is statistically significant in all but one of the combinations. Avoidance questions 33a and 33b are statistically significant in only 18 and 36 of 54 combinations. Frequency of consumption of bakery products and chips are not always determinants of the percentage of calories from saturated fat. Avoidance question 35, size of meat portion, is statistically significant in 38 of 54 combinations.

Modification question 30 regarding frequency of eating fried chicken is significant in all combinations. Modification question 31, removing skin from chicken, is significant in all 107 of 162 combinations. Modification question 36, trimming visible fat from meat, is significant in 103 of 162 combinations.

Substitution questions 26b and 26c, are statistically significant in all combinations where present. Substitution questions 26a and 26d are significant in 77 and 76 of 81 combinations. Eating lower-fat luncheon meats (26a); choosing milk with lower fat content (26b); eating low-fat cheese (26c); eating frozen yogurt or sherbet instead of ice cream (26d) are key factors in explaining the variability in the percentage of calories from saturated fat; using low-calorie salad dressing instead of regular salad dressing (26e); and eating fish or poultry instead of meat (26g) are not always key

determinants in explaining the variability in the percentage of calories from saturated fat. Substitution questions 26e and 26g are significant only in 63 and 55 of 81 combinations.

Replacement question 26f is statistically significant in 423 of 486 combinations. Having fruit for dessert when eating dessert typically is a key factor in explaining the variability in the percentage of calories from saturated fat in approximately 87 percent of the combinations.

In sum, substitution questions (26a, 26b, 26c, and 26d), avoidance questions 27, 28, 29, 32, 34, and 37; modification question 30 and replacement question 26f are quite useful in describing percentage of calories from saturated fat. Avoidance questions 33a, 33b, and 35; modification questions 31 and 36; and substitution questions 26e and 26g have limited use in explaining the variability in percentage of calories from saturated fat.

DIETARY GUIDELINE FOR FAT

This analysis rests on logit analysis due to the discrete nature of the dependent variable (that is, a particular individual either meets or fails to meet the dietary guidelines for fat.) The logit analysis ultimately provides a probability that an individual with a particular profile meets the dietary guidelines for total fat. The goodness-of-fit statistics. McFadden's R^2, vary from .0582 to .0970. Between 32.87 percent and 36.22 percent of individuals in our analytic sample met the dietary guidelines for fat (less than 30 percent of calories from total fat) for the period 1994 to 1996. The percent of correct predictions from the logit analysis varies from 66.24 percent to 73.05 percent. From the logit analysis, we predict that an individual meets the dietary guideline for total fat when the predicted probability exceeds 0.5, and we predict that an individual fails to meet the dietary guideline for total fat when the predicted probability is less than 0.5. The actual behavior and the predicted behavior coincide 66 to 73 percent of the time. All combinations of avoidance, modification, substitution and replacement questions as a group are jointly significant in describing the dietary guideline for fat. On this basis, the paradigm developed by Kristal, *et al.*, is a useful construct in explaining whether or not individuals meet the dietary guideline for fat.

A summary of the performance of particular questions dealing with avoidance, modification, substitution and replacement is exhibited in Table 6. Avoidance question 37 is statistically significant in all combinations where present. This question corresponds to behavior regarding the frequency of eating eggs. Avoidance questions 27, 28, and 34 are significant in 40, 48, and 44 of 54 combinations respectively. Avoidance questions 29, 32, and 35 are significant in 36, 36, and 38 of 754 combinations. Frequency of consumption of bakery products (question 33a) and chips (question 33b) are not key determinants of the dietary guideline for fat. These questions are significant in only 20 and 2 of 54 combinations respectively.

Modification question 30 regarding frequency of eating fried chicken is significant in all but six combinations where present. Modification question 31, removing skin from chicken, is significant in 102 of 162 combinations. Modification question 36. trimming visible fat from meat, is significant in only 45 of 162 combinations.

Substitution questions 26b, 26c, and 26d are statistically significant in all combinations where present. Question 26a is significant in 80 of 81 combinations. Consequently, eating lower-fat luncheon meats (26a); choosing milk with lower fat content (26b); eating low-fat cheese (26c); eating frozen yogurt or sherbet instead of ice cream (26d) are useful in explaining whether or not individuals meet the dietary guideline for fat; using low-calorie salad dressing instead of regular salad dressing (26e); and eating fish or poultry instead of meat (26g) are not the best substitution

questions in explaining whether or not individuals meet the dietary guideline for fat. Question 26e is significant in 74 of 81 combinations, and question 26g is significant in 40 of 81 questions.

Table 5. Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Percentage of Calories from Saturated Fat.

AVOIDANCE QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
27	18/18	18/18	18/18	54/54
28	18/18	18/18	18/18	54/54
29	17/18	18/18	18/18	53/54
32	18/18	18/18	18/18	54/54
33a	0/18	18/18	0/18	18/54
33b	0/18	18/18	18/18	36/54
34	18/18	18/18	18/18	54/54
35	14/18	18/18	6/18	38/54
37	18/18	18/18	18/18	54/54
MODIFICATION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
30	54/54	54/54	54/54	162/162
31	0/54	53/54	54/54	107/162
36	49/54	47/54	7/54	103/162
SUBSTITUTION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
26a	25/27	27/27	25/27	77/81
26b	27/27	27/27	27/27	81/81
26c	27/27	27/27	27/27	81/81
26d	27/27	22/27	27/27	76/81
26e	21/27	15/27	27/27	63/81
26g	27/27	21/27	7/27	55/81
REPLACEMENT QUESTION	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
26f	102/162	159/162	162/162	423/486

Level of significance = 0.05

Replacement question 26f is only statistically significant in 161 of 486 combinations. Having fruit for dessert when eating dessert typically is not generally a factor in explaining whether or not individuals meet the dietary guideline for fat.

In sum, substitution questions (26a, 26b, 26c, and 26d), avoidance questions 27, 28, 34, and 37 and modification question 30 are useful in describing the dietary guideline for fat. Avoidance questions 33a and 33b, modification question 36, and replacement question 26f are generally not useful. The remaining avoidance questions (29, 32, and 35) and modification question (31) have limited use in dealing with analyses of the dietary guideline for fat.

Summary of Analysis Pertaining to Combinations of AMSR Questions

The principal objective is to examine the statistical significance of the number of questions asked on the DHKS about dietary behavior related to fat intake. Kristal, *et al.*'s model of avoidance, modification, substitution, and replacement is a useful construct in the analysis of patterns regarding fat intake. Clearly from Table 7, avoidance questions 27, 28, 34, and 37; modification question 30; and substitution questions 26a, 26b, 26c, 26d are statistically significant in over 90 percent of combinations in analyses of percentage of calories from total fat, percentage of calories from saturated fat, and the dietary guideline for fat. Avoidance questions 33a, 33b, and 35; modification questions 31 and 36; substitution question 26g, and replacement question 26f are statistically significant in less than 70 percent of combinations in analyses of fat intake. Avoidance questions 29 and 32 and substitution question 26e are significant in nearly 90 percent of combinations in analysis of fat intake. On the basis of our analysis, one could recommend the retention of questions 26a, 26b, 26c, 26d, 26e, 27, 28, 29, 30, 32, 34, and 37 for future surveys, and one could recommend the elimination of questions 26f, 26g, 31, 33a, 33b, 35, and 36.

Consideration of All Avoidance, Modification, Substitution, and Replacement Questions Simultaneously

Up to this point, 162 combinations of avoidance, modification, substitution, and replacement (AMSR) questions were considered in assessing the predictive ability of the model developed by Kristal. In this section, we consider all avoidance, modification, substitution, and replacement questions simultaneously in assessing fat intake. We discuss empirical results for percentage of calories from total fat; percentage of calories from saturated fat; and meeting /not meeting the dietary guideline for fat. Associated with each of these three ways to describe fat intake, there are four analyses - - one for 1994, one for 1995, one for 1996, and a pooled analysis across the three years. Details are exhibited in Appendices D, E, F, and G. Because of sample size considerations, emphasis is placed on the pooled analyses.

Percentage of Calories from Total Fat

The goodness-of-fit (R^2) statistics range from .1841 to .2291. The group of AMSR questions, all other factors invariant, is statistically important in explaining the variability on percentage of calories from total fat. As exhibited in Table 8, the key avoidance questions, in terms of statistical significance are questions 27, 29, 32, and 37. Questions 28 and 34 are significant using data from 1994, but these questions are not significant in the pooled analysis. Similarly, avoidance questions 33b and 35 are significant

Table 6. **Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for the Dietary Guideline for Fat.**

AVOIDANCE QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Total**
27	18/18	18/18	4/18	40/54
28	18/18	12/18	18/18	48/54
29	0/18	18/18	18/18	36/54
32	0/18	18/18	18/18	36/54
33a	0/18	5/18	15/18	20/54
33b	0/18	0/18	2/18	2/54
34	18/18	15/18	11/18	44/54
35	16/18	16/18	6/18	38/54
37	18/18	18/18	18/18	54/54
MODIFICATION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Totals**
30	48/54	54/54	54/54	156/162
31	0/54	52/54	50/54	102/162
36	34/54	8/54	3/54	45/162
SUBSTITUTION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Totals**
26a	27/27	27/27	26/27	80/81
26b	27/27	27/27	27/27	81/81
26c	27/27	27/27	27/27	81/81
26d	27/27	27/27	27/27	81/81
26e	27/27	20/27	27/27	74/81
26g	27/27	13/27	0/27	40/81
REPLACEMENT QUESTION	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	1994	**1995**	**1996**	**Totals**
26f	0/162	0/162	161/162	161/486

Level of significance = 0.05

Table 7. **A Summary of Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model in Assessing Fat Intake.**

AVOIDANCE QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
	Percentage of calories from fat	Percentage of calories from saturated fat	Dietary guideline for fat	Percentage of all combinations statistically significant
27	54/54	54/54	40/54	91.3
28	54/54	54/54	48/54	96.2
29	52/54	53/54	36/54	87.0
32	54/54	54/54	36/54	88.8
33a	13/54	18/54	20/54	31.4
33b	36/54	36/54	2/54	48.1
34	53/54	54/54	44/54	93.2
35	36/54	38/54	38/54	69.1
37	54/54	54/54	54/54	100.0
MODIFICATION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
30	162/162	162/162	156/162	98.7
31	85/162	107/162	102/162	60.4
36	103/162	103/162	45/162	51.6
SUBSTITUTION QUESTIONS	# COMBINATIONS STATISTICALLY SIGNIFICANT			
26a	80/81	77/81	80/81	97.5
26b	81/81	81/81	81/81	100.0
26c	81/81	81/81	81/81	100.0
26d	78/81	76/81	81/81	96.7
26e	78/81	63/81	74/81	88.4
26g	58/81	55/81	40/81	62.9
REPLACEMENT QUESTION	# COMBINATIONS STATISTICALLY SIGNIFICANT			
26f	254/486	423/486	161/486	57.4

Level of significance = 0.05

using data from 1995, but they are not significant in the pooled analysis. Avoidance question 33a is not statistically important in any analysis with the full slate of AMSR questions.

The key modification questions are 30 and 36. Question 31 is not statistically important at all. As well, the important substitution questions are 26b and 26c only. Questions 26a, 26d, 26e, and 26g are not significant in any analysis with the entire list of AMSR questions. Finally, replacement question 26f is not a key question in explaining variability of percentage of calories from total fat.

Percentage of Calories from Saturated Fat

The goodness of fit (R^2) statistics range from .1920 to .2291. The group of AMSR questions, *ceteris paribus*, adds significantly in the explanation of variability in the percentage of calories from saturated fat. As exhibited in Table 9, the key avoidance questions are 27, 32, 33b, and 37. Questions 28 and 34 are significant using data from 1994, but these questions are not significant in the pooled analysis. Question 29 is significant using data from 1994 and 1995, but this question is not significant in the pooled analysis. Question 35 is significant using data from 1995, but this question is not significant in the pooled analysis. Avoidance question 33a is not statistically important in any analysis with the full list of AMSR questions.

Similar to the case of percentage of calories from total fat, the key modification questions are 30 and 36. Question 31 is not statistically important. Also, similar to the case for total fat, the only significant substitution questions are 26b and 26c. Finally, replacement question 26f is statistically important in the pooled analysis, but this question is not significant using data from individual years.

Dietary Guideline for Fat

McFadden's R^2 for this analysis varies from .1032 to .1487. This prediction-success ratio in the logit analysis runs from 70.17 percent to 72.60 percent. Again, the group of AMSR questions, holding all other factors constant, is statistically important in explaining whether or not the dietary guideline for fat is met.

As exhibited in Table 10, the key avoidance questions are 35 and 37. Avoidance questions 28, 32, and 33a are significant using data from 1996, but these questions are not significant in the pooled analysis. Similarly, avoidance questions 27 and 29 are significant using data from 1995, but these questions are not significant in the pooled analysis.

Again, the key modification questions are 30 and 36. The key substitution questions are 26b and 26c. Modification question 31 and substitution questions 26a, 26d, 26e, and 26g are not significant in any analysis involving all 19 AMSR questions. Finally, replacement question 26f is significant using data only from 1996.

Summary of Considering All 19 AMSR Questions Simultaneously

In considering all AMSR questions simultaneously, based on data pooled from 1994 to 1996, avoidance question 37; modification questions 30 and 36; and substitution questions 26b and 26c are statistically significant in explaining the variability in the percentage of calories from total fat, the percentage of calories from saturated fat, and in ascertaining whether or not the dietary guideline for fat is met. Avoidance questions 27 and 32 are important in the percentage of calories from total fat and saturated fat; avoidance question 29 is important in considering the percentage of calories from total fat. Avoidance question 33b is important in considering the

percentage of calories from saturated fat. Avoidance question 35 is important in considering the dietary guideline for fat. Additionally replacement question 26f is a key determinant in explaining the variability in the percentage of calories from saturated fat.

Modification question 31, and substitution questions 26a, 26d, 26e, 26g are not important statistically in assessing fat intake. That is, with the full slate of AMSR questions, these questions are not statistically significant in any analysis. Avoidance questions 28, 33a, and 34 are not important statistically using pooled data. However, these questions are significant in analyses based on data from particular years.

Table 8. Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Percentage of Calories from Total Fat - - All 19 Questions Considered Simultaneously.

Avoidance Questions	1994	1995	1996	Pooled
		p-values		
27	.01630*	.00215*	.20761	.00004*
28	.01486*	.70061	.15525	.30008
29	.26750	.00308*	.10661	.02036*
32	.89935	.02496*	.06964	.01749*
33a	.90435	.60352	.14458	.79246
33b	.09187	.04974*	.05510	.05745
34	.01998*	.80943	.18680	.58366
35	.37472	.04488*	.73921	.06387
37	.00016*	.00003*	.00832*	.00000*
Modification Questions				
30	.06133	.00489*	.31587	.00011*
31	.68849	.62331	.06785	.26362
36	.00073*	.59861	.25926	.03062*
Substitution Questions				
26a	.79720	.07659	.72501	.35901
26b	.00746*	.00008*	.05577	.00000*
26c	.00250*	.21022	.35979	.00244*
26d	.50280	.47120	.05233	.07507
26e	.90186	.99319	.66918	.87954
26g	.09225	.20523	.85746	.21677
Replacement Question				
26f	.91065	.45137	.09415	.12649
n	1612	1734	1680	5026
R^2 ($\bar{R}^2$)	.2268 (.1810)	.2291 (.1868)	.2147 (.1702)	.1841 (.1693)
F (all AMSR questions)	.00000	.00000	.00000	.00000

Level of significance = 0.05

Table 9. Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Percentage of Calories from Saturated Fat - - All 19 Questions Considered Simultaneously.

Avoidance Questions	1994	1995	1996	Pooled
		p-values		
27	.06060	.00421*	.05300	.00013*
28	.00726*	.89223	.17725	.31264
29	.03183*	.01166*	.48069	.57549
32	.94060	.02199*	.16668	.04759*
33a	.55502	.22569	.71188	.63783
33b	.08304	.04917*	.00925*	.01674*
34	.02369*	.64622	.06188	.26565
35	.25809	.09923	.84080	.08704
37	.00011*	.00037*	.01772*	.00000*
Modification Questions				
30	.17785	.00141*	.09146	.00005*
31	.55771	.33767	.12759	.21809
36	.00099*	.72189	.22989	.02678*
Substitution Questions				
26a	.53838	.17851	.59266	.28198
26b	.04400*	.00011*	.12184	.00007*
26c	.03753*	.26094	.47419	.00844*
26d	.66509	.43397	.16553	.26677
26e	.80237	.93160	.65803	.90404
26g	.04341*	.11607	.92365	.09956
Replacement Question				
26f	.73026	.18582	.05440	.01637*
n	1612	1734	1680	5026
R^2 ($\bar{R}^2$)	.2258 (.1800)	.2432 (.2018)	.2202 (.1760)	.1920 (.1773)
F (all AMSR questions)	.00000	.00000	.00000	.00000

Level of significance = 0.05

Table 10. Performance of Particular Questions Dealing with the Avoidance, Modification, Substitution, and Replacement Model for Meeting the Dietary Guideline for Fat - - All 19 Questions Considered Simultaneously.

Avoidance Questions	1994	1995	1996	Pooled
		p-values		
27	.46694	.00685*	.79818	.16700
28	.27591	.39342	.01953*	.34283
29	.73914	.01733*	.06394	.06763
32	.49261	.25319	.01338*	.15315
33a	.52017	.25513	.04798*	.66155
33b	.06449	.19641	.91045	.23871
34	.06589	.99620	.72695	.71383
35	.01197*	.12690	.57218	.00821*
37	.00174*	.00022*	.00663*	.00000*
Modification Questions				
30	.43217	.14097	.51467	.02284*
31	.69697	.30463	.52681	.41665
36	.00603*	.19246	.59522	.00906*
Substitution Questions				
26a	.63692	.46973	.51609	.76266
26b	.07577	.00080*	.15734	.00012*
26c	.00457*	.04790*	.69233	.00676*
26d	.40870	.61937	.18083	.14001
26e	.55184	.75448	.41014	.81403
26g	.12399	.59945	.57966	.40230
Replacement Question				
26f	.80068	.84798	.04271*	.28605
n	1612	1734	1680	5026
McFadden's R^2 (Prediction-Success Ratio)	.14871 (72.29%)	.14209 (72.60%)	.12906 (70.17%)	.10329 (71.13%)
χ^2 (all AMSR Questions)	.00000	.00000	.00000	.00000

Level of significance = 0.05

Recommendations for AMSR Questions

Based upon the summary of analyses pertaining to the combinations of AMSR questions as well as the summary of analyses considering all 19 AMSR questions simultaneously, we make the following recommendations. Clearly Kristal *et al*'s model of avoidance, modification, substitution, and replacement is a useful construct in the analysis of patterns regarding fat intake. Also, substitution questions 26b and 26c; modification question 30; and avoidance question 37 unequivocally are the best questions in terms of statistical significance across all analyses. Clearly, we recommend that questions 26b, 26c, 30, and 37 be retained for future surveys. As well avoidance question 33a; modification question 31; and substitution question 26g are not statistically important in assessing fat intake. Without question, there is overwhelming statistical evidence to recommend elimination of these questions. In case of the remaining 12 questions - - 26a, 26d, 26e, 26f, 27, 28, 29, 32, 33b, 34, 35, and 36, the statistical evidence is mixed. Taking a conservative stance, we recommend that these questions be retained for future surveys despite the fact that they may have limited usefulness in assessing fat intake.

Additional Determinants of Fat Intake

As a by-product of this analysis, we are in a position to ascertain additional determinants of the percentage of calories from either total fat or saturated fat as well as the dietary guideline for fat. In this discussion, we consider all AMSR questions simultaneously using data pooled over the years 1994 to 1996. Details of the regression runs are exhibited in Appendix G.

As delineated in Table 11, there are 10 additional key factors of the percentage of calories from total fat; 9 of the percentage of calories from saturated fat; and 9 for the dietary guideline for fat. The common additional determinants across the board are: (1) low-fat diet; (2) region; (3) age; (4) race; (5) body mass index; and (6) smoking status.

Percentage of Calories from Total Fat

The estimated coefficients and t-statistics associated with these factors are exhibited in Table 12. From Table 12, additional key determinants, beside the AMSR questions, of the percentage of calories from total fat are: (1) body mass index; (2) low-fat diet; (3) region; (4) urbanization; (5) employment status; (6) awareness of the link of diet to health; (7) age; (8) gender; (9) race; and (10) smoking status. The greater the body mass index of an individual the <u>greater</u> the percentage of calories from total fat. Households located in the Northeast and the West have a <u>lower</u> percentage of calories from total fat than do households located in the South. Households located in non-metropolitan statistical areas have a <u>higher</u> percentage of calories from total fat than do households located in central cities.

Individuals that are employed have a higher percentage of calories from total fat than individuals who are unemployed. Black and white individuals have a <u>higher</u> percentage of calories from total fat than do other persons. Individuals who have never smoked have a <u>lower</u> percentage of calories from total fat than do individuals who have smoked at one time but are not smoking now or individuals who are still smoking. Individuals who are on a low-fat diet have <u>lower</u> percentage of calories from total fat than do individuals who are not on a low-fat diet. Controlling all other factors, males have a <u>lower</u> percentage of calories from total fat than do females. There exists a nonlinear relationship between age and the percentage of calories from

total fat. This percentage increases with age until the age of 58 and thereafter the percentage of calories from total fat declines with age. Finally, individuals who agree that there is a link between diet and health paradoxically have a higher percentage of calories from total fat than do individuals who disagree with that statement.

Non-significant determinants of the percentage of calories from total fat are: (1) poverty threshold; (2) participation in the Food Stamp program; (3) exercise status; (4) self-assessed health status; (5) low-calorie diet; (6) pregnant or lactating status; (7) vegetarian; (8) seasonality; (9) day of the week; (10) ethnicity; and (11) education.

Table 11. Additional Determinants of Percentage of Calories from Either Total Fat or Saturated Fat as well as the Dietary Guideline for Fat - - All 19 Questions Considered Simultaneously Using Pooled Data from 1994-1996.

PERCENTAGE OF CALORIES FROM TOTAL FAT	PERCENTAGE OF CALORIES FROM SATURATED FAT	DIETARY GUIDELINE FOR FAT
Age	Age	Age
Awareness of the Link	Body Mass Index	Awareness of the Link
Between Diet and Health	Education	Between Diet and Health
Body Mass Index	Low-Fat Diet	Body Mass Index
Employment Status	Race	Employment Status
Gender	Region	Low-Calorie Diet
Low-Fat Diet	Smoking Status	Low-Fat Diet
Race	Urbanization	Race
Region	Vegetarian	Region
Smoking Status		Smoking Status
Urbanization		

R^2	.1841	.1920	.1033 (McFadden's R^2)
$\bar{R}^2$	.1693	.1773	(71.13%) (Prediction-Success Ratio)
n	5026	5026	5026

Table 12. Analysis of Demographic Factors, Characteristics of Individuals, and Other Factors on the Percentage of Calories from Fat, Data from 1994-1996.

VARIABLE	ESTIMATED COEFFICIENT	t-STATISTIC	F-Statistics
BMI-SP LFATDIET	0.0747* -2.1250*	3.49 -5.22	
NE MW WEST	-0.6619* -0.1390 -0.5706*	-2.09 -0.50 -1.86	Region .1045[a]
MSANCC NMSA	0.2720 0.8907*	1.07 3.02	Urbanization .0085[a]
POVCAT2 POVCAT3	-0.3640 -0.0134	-1.17 -0.03	Poverty Category .2698[a]
EMP	0.4544*	1.63	
REGEX MODEX	-0.1506 -0.0370	-0.63 -0.10	Exercise Status .8060[a]
GOODH FSYES LCALDIET PREGLAC KQ2FA VEGET	0.2181 -0.2360 -0.2712 0.6553 0.6589* -1.0217	0.72 -0.58 -0.53 0.57 1.82 -1.40	
WINTER SPRING SUMMER	0.0514 0.2255 -0.4761	0.17 0.77 -1.48	Seasonality .1223[a]
WKDYWKDY WKDYWKED	-0.5141 -0.1841	-0.82 -0.29	Day of Week .2442[a]
AGE AGE2 MALE	0.1502* -0.0013* -0.4332*	3.98 -3.57 -1.80	
HS COL	-0.2774 -0.4720	-0.86 -1.40	Education .3639[a]
NHISP	-0.5347	-1.18	
BLACK OTHER	0.0948 -2.5903*	0.26 -5.07	Race .0000[a]
NVSMOKED SMOKEN	-0.5213* 0.1367	-1.90 0.44	Smoking Status .0181[a]
CONSTANT	28.408*	14.39	
R^2	.1841		
$\bar{R}^2$	.1693		

* indicates statistically significant at the 0.05 level

[a] p-value of F-statistic

See Appendix H for the variable definitions.

Percentage of Calories from Saturated Fat

The estimated coefficients and t-statistics associated with these factors are exhibited in Table 13. From Table 13, additional key determinants, besides the AMSR questions of the percentage of calories from saturated fat are: (1) body mass index; (2) low-fat diet; (3) vegetarian; (4) education; (5) race; (6) smoking status; (7) urbanization; (8) age; and (9) region.

The greater the body mass index of an individual the <u>greater</u> the percentage of calories from saturated fat. Individuals with at least a high school education have a <u>lower</u> percentage of calories from saturated fat than do individuals without a high school education. Black and white individuals have a <u>higher</u> percentage of calories from saturated fat than do other individuals. Individuals who have never smoked have a <u>lower</u> percentage of calories from saturated fat than do individuals who have smoked at one time but are not smoking now or individuals who are still smoking. Individuals who are on a low-fat diet have a <u>lower</u> percentage of calories from saturated fat than do individuals who are not on a low-fat diet. Finally, individuals who are vegetarians have a <u>lower</u> percentage of calories from saturated fat than do individuals who are not vegetarians.

Households located in the Northeast and the West have a <u>lower</u> percentage of calories from saturated fat than those located in the South. Households located in non-metropolitan statistical areas have a <u>higher</u> percentage of calories from saturated fat than do households located in central cities. There exists a nonlinear relationship between age and the percentage of calories from saturated fat. This percentage increases with age until the age of 53 and thereafter the percentage of calories from saturated fat declines with age.

Non-significant determinants of the percentage of calories from saturated fat are: (1) employment status; (2) exercise status; (3) self-assessed health status; (4) low-calorie diet; (5) pregnant or lactating status; (6) seasonality; (7) day of the week; (8) ethnicity; (9) poverty category; (10) participation status in the Food Stamp Program; (11) awareness of the link between diet and health; and (12) gender.

Table 13. Analysis of Demographic Factors, Characteristics of Individuals, and Other Factors on the Percentage of Calories from Saturated Fat, Data from 1994-1996.

VARIABLE	ESTIMATED COEFFICIENT	t-STATISTIC	F-Statistic
BMI-SP	0.0376*	3.92	
LFATDIET	-0.9099*	-5.10	
NE	-0.5764*	-3.84	
MW	-0.0718	-0.59	Region .0002[a]
WEST	-0.4077*	-3.08	
MSANCC	0.0064	0.05	Urbanization .0003[a]
NMSA	0.4515*	3.49	
POVCAT2	-0.0756	-0.55	Poverty Category .2083[a]
POVCAT3	0.1186	0.78	
EMP	0.1524	1.27	
REGEX	-0.0289	-0.27	Exercise Status .9549[a]
MODEX	-0.0010	-0.01	
GOODH	0.0868	0.65	
FSYES	-0.0518	-0.29	
LCALDIET	-0.0260	-0.11	
PREGLAC	-0.1940	-0.44	
KQ2FA	0.1443	0.91	
VEGET	-0.5825*	-1.82	
WINTER	0.0355	0.26	Seasonality .2668[a]
SPRING	0.0079	0.06	
SUMMER	-0.1840	-1.46	
WKDYWKDY	-0.4210	-1.40	Day of Week .0688[a]
WKDYWKED	-0.2315	-0.79	
AGE	0.0520*	3.23	
AGE2	-0.0004*	-3.12	
MALE	-0.0034	-0.03	
HS	-0.1911	-1.34	Education .0144[a]
COL	-0.4043*	-2.74	
NHISP	-0.1825	-0.90	
BLACK	0.2883*	1.77	Race .0000[a]
OTHER	-1.0430*	-4.75	
NVSMOKED	-0.2579*	-2.16	Smoking Status .0132[a]
SMOKEN	0.0277	0.20	
CONSTANT	10.906*	12.69	
R^2	.1920		
$\bar{R}^2$	.1773		

* indicates statistically significant at the 0.05 level

[a] p-value of F-statistic

See Appendix H for the variable definitions.

Dietary Guideline for Fat

The estimated coefficients and t-statistics associated with these factors are exhibited in Table 14. From Table 14, additional key determinants, besides the AMSR questions, of the dietary guideline for fat are: (1) low-fat diet; (2) region; (3) employment status; (4) body mass index; (5) awareness of the link of diet to health; (6) low-calorie diet; (7) age; (8) race; and (9) smoking status. Individuals located in the Northeast and the West have a <u>higher</u> probability of meeting the dietary guideline for fat than do individuals located in the South. Individuals that have a lower body mass index have a <u>lower</u> probability of meeting the dietary guideline for fat than do individuals with higher indices. White and black persons have a <u>lower</u> probability of meeting the dietary guideline for fat than do other persons. Individuals who have never smoked have a <u>higher</u> probability of meeting the dietary guideline for fat than do individuals who have smoked at one time but are not smoking now or individuals who are still smoking. Individuals who are on a low-fat or low-calorie diet have a <u>higher</u> probability of meeting the dietary guideline for fat than do individuals who are not on a low-fat or low-calorie diet. Individuals who agree that there is a link between diet and health paradoxically have a <u>lower</u> probability of meeting the dietary guideline for fat than do individuals who disagree with that statement. Employed individuals have a lower probability of meeting the dietary guideline for fat than do unemployed individuals. There exists a nonlinear relationship between age and meeting the dietary guideline for fat. The probability of meeting the guideline for fat declines with age until the age of 57 and thereafter this probability increases with age.

Non-significant determinants of the dietary guideline for fat are: (1) urbanization; (2) participation in the Food Stamp Program; (3) exercise status; (4) self-assessed health status; (5) education; (6) pregnant or lactating status; (7) vegetarian; (8) seasonality; (9) day of the week; (10) ethnicity; (11) poverty category; and (12) gender.

Table 14. Logit Analysis of Demographic Factors, Characteristics of Individuals, and Other Factors on the Dietary Guidelines for Fat, Data from 1994 to 1996.

VARIABLE	ESTIMATED COEFFICIENT	t-STATISTIC	
BMI-SP LFATDIET	-0.0229* 0.3059*	-3.45 2.65	
NE MW WEST	0.1760* -0.0154 0.1683*	1.84 -0.17 1.77	Region .0872[a]
MSANCC NMSA	-0.0391 -0.1355	-0.49 -1.44	Urbanization .3322[a]
POVCAT2 POVCAT3	-0.0228 -0.1269	-0.23 -1.16	Poverty Category .3670[a]
EMP	-0.2660*	-3.18	
REGEX MODEX	0.0623 -0.0022	0.83 -0.02	Exercise Status .6512[a]
GOODH FSYES LCALDIET PREGLAC KQ2FA VEGET	-0.0304 -0.0302 0.2748* 0.1794 -0.2409* 0.1566	-0.32 -0.23 2.06 0.51 -2.19 0.76	
WINTER SPRING SUMMER	-0.0248 -0.0771 0.0700	-0.26 -0.83 0.78	Seasonality .4058[a]
WKDYWKDY WKDYWKED	0.2203 0.1145	1.09 0.56	Day of Week .1878[a]
AGE AGE2 MALE	-0.0228* 0.0002* 0.0982	-1.91 1.74 1.31	
HS COL	-0.0022 0.1229	-0.02 1.18	Education -.2433[a]
NHISP	0.1780	1.27	
BLACK OTHER	0.0054 0.6192*	0.04 4.08	Race .0002[a]
NVSMOKED SMOKEN	0.1381* -0.0514	1.61 -0.53	Smoking Status .0432[a]
CONSTANT	0.8348	1.37	
McFadden R^2	.1032		
Percentage of correct classifications		71.13	

* indicates statistically significant at the 0.05 level

[a] p-value of χ^2 statistic

See Appendix H for the variable definitions

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Appendices

Appendix A.

Combinations of Avoidance, Modification, Substitution, and Replacement

Dependent Variable: Percentage of Calories from Fat

Table A.1 - - 1994
Table A.2 - - 1995
Table A.3 - - 1996

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1	27	30	26A	26F	1663	90.58%	0.1598	0.1364	-5673.9	0.0000	0.0000	0.0006	0.0108	0.1397
2	27	30	26B	26F	1666	90.74%	0.1688	0.1457	-5674.8	0.0000	0.0000	0.0038	0.0000	0.0759
3	27	30	26C	26F	1664	90.63%	0.1724	0.1494	-5664.4	0.0000	0.0000	0.0039	0.0000	0.3013
4	27	30	26D	26F	1666	90.74%	0.1625	0.1393	-5681.0	0.0000	0.0000	0.0010	0.0017	0.2985
5	27	30	26E	26F	1666	90.74%	0.1602	0.1369	-5680.5	0.0000	0.0000	0.0007	0.0073	0.1808
6	27	30	26G	26F	1664	90.63%	0.1623	0.1390	-5673.4	0.0000	0.0000	0.0021	0.0002	0.2774
7	27	31	26A	26F	1663	90.58%	0.1548	0.1313	-5679.8	0.0000	0.0000	0.0441	0.0094	0.0969
8	27	31	26B	26F	1666	90.74%	0.1653	0.1421	-5679.3	0.0000	0.0000	0.0643	0.0000	0.0581
9	27	31	26C	26F	1664	90.63%	0.1682	0.1452	-5667.2	0.0000	0.0000	0.2009	0.0000	0.2835
10	27	31	26D	26F	1666	90.74%	0.1579	0.1345	-5745.0	0.0000	0.0000	0.0673	0.0019	0.2376
11	27	31	26E	26F	1666	90.74%	0.1552	0.1318	-5689.2	0.0000	0.0000	0.0993	0.0118	0.1132
12	27	31	26G	26F	1664	90.63%	0.1588	0.1354	-5677.9	0.0000	0.0000	0.0459	0.0001	0.2119
13	27	36	26A	26F	1659	90.36%	0.1576	0.1341	-5665.0	0.0000	0.0000	0.0089	0.0059	0.1097
14	27	36	26B	26F	1662	90.52%	0.1686	0.1455	-5663.8	0.0000	0.0000	0.0066	0.0000	0.0673
15	27	36	26C	26F	1660	90.41%	0.1726	0.1496	-5653.1	0.0000	0.0000	0.0082	0.0000	0.2963
16	27	36	26D	26F	1662	90.52%	0.1612	0.1378	-5671.3	0.0000	0.0000	0.0078	0.0010	0.2843
17	27	36	26E	26F	1662	90.52%	0.1583	0.1348	-5674.1	0.0000	0.0000	0.0124	0.0066	0.1382
18	27	36	26G	26F	1660	90.41%	0.1626	0.1393	-5662.0	0.0000	0.0000	0.0024	0.0000	0.2503
19	28	30	26A	26F	1669	90.90%	0.1556	0.1322	-5697.4	0.0000	0.0000	0.0001	0.0084	0.1145
20	28	30	26B	26F	1672	91.07%	0.1634	0.1402	-5699.4	0.0000	0.0000	0.0005	0.0000	0.0670
21	28	30	26C	26F	1670	90.96%	0.1680	0.1449	-5688.1	0.0000	0.0001	0.0007	0.0000	0.2872
22	28	30	26D	26F	1672	91.07%	0.1589	0.1357	-5703.8	0.0000	0.0001	0.0002	0.0005	0.3029
23	28	30	26E	26F	1672	91.07%	0.1547	0.1313	-5708.0	0.0000	0.0001	0.0001	0.0114	0.1283
24	28	30	26G	26F	1670	90.96%	0.1592	0.1359	-5695.7	0.0000	0.0000	0.0004	0.0000	0.2609
25	28	31	26A	26F	1669	90.90%	0.1484	0.1248	-5705.4	0.0000	0.0000	0.0395	0.0051	0.0644
26	28	31	26B	26F	1672	91.07%	0.1579	0.1346	-5705.9	0.0000	0.0000	0.0603	0.0000	0.0420
27	28	31	26C	26F	1670	90.96%	0.1621	0.1389	-5695.0	0.0000	0.0000	0.1609	0.0000	0.2013
28	28	31	26D	26F	1672	91.07%	0.1524	0.1290	-5711.3	0.0000	0.0000	0.0702	0.0005	0.2129
29	28	31	26E	26F	1672	91.07%	0.1473	0.1237	-5716.4	0.0000	0.0000	0.0779	0.0209	0.0715
30	28	31	26G	26F	1670	90.96%	0.1540	0.1305	-5701.9	0.0000	0.0000	0.0528	0.0000	0.1739
31	28	36	26A	26F	1665	90.69%	0.1495	0.1259	-5692.3	0.0000	0.0000	0.0271	0.0027	0.0646
32	28	36	26B	26F	1668	90.85%	0.1595	0.1362	-5692.2	0.0000	0.0000	0.0225	0.0000	0.0423
33	28	36	26C	26F	1666	90.74%	0.1649	0.1417	-5680.1	0.0000	0.0000	0.0241	0.0000	0.2261
34	28	36	26D	26F	1668	90.85%	0.1542	0.1308	-5697.4	0.0000	0.0000	0.0249	0.0002	0.2386
35	28	36	26E	26F	1668	90.85%	0.1486	0.1250	-5702.9	0.0000	0.0000	0.0327	0.0111	0.0788
36	28	36	26G	26F	1666	90.74%	0.1563	0.1328	-5687.6	0.0000	0.0000	0.0099	0.0000	0.1897
37	29	30	26A	26F	1668	90.85%	0.1456	0.1219	-5700.8	0.0000	0.0474	0.0001	0.0075	0.0759
38	29	30	26B	26F	1671	91.01%	0.1543	0.1309	-5705.0	0.0000	0.0638	0.0009	0.0000	0.0294
39	29	30	26C	26F	1669	90.90%	0.1615	0.1382	-5691.1	0.0000	0.0185	0.0015	0.0000	0.1901
40	29	30	26D	26F	1671	91.01%	0.1513	0.1277	-5708.0	0.0000	0.0481	0.0003	0.0001	0.2211
41	29	30	26E	26F	1671	91.01%	0.1475	0.1239	-5711.7	0.0000	0.0273	0.0003	0.0018	0.0825
42	29	30	26G	26F	1669	90.90%	0.1486	0.1250	-5702.7	0.0000	0.0651	0.0004	0.0001	0.1747
43	29	31	26A	26F	1668	90.85%	0.1392	0.1154	-5709.9	0.0000	0.0093	0.0190	0.0081	0.0377
44	29	31	26B	26F	1671	91.01%	0.1499	0.1263	-5709.3	0.0000	0.0183	0.0338	0.0000	0.0207
45	29	31	26C	26F	1669	90.90%	0.1563	0.1329	-5696.3	0.0000	0.0047	0.1195	0.0000	0.1488
46	29	31	26D	26F	1671	91.01%	0.1455	0.1218	-5713.6	0.0000	0.0107	0.0443	0.0002	0.1717
47	29	31	26E	26F	1671	91.01%	0.1413	0.1175	-5717.7	0.0000	0.0052	0.0615	0.0026	0.0563
48	29	31	26G	26F	1669	90.90%	0.1438	0.1200	-5707.4	0.0000	0.0196	0.0226	0.0000	0.1267
49	29	36	26A	26F	1663	90.58%	0.1395	0.1155	-5694.6	0.0000	0.0122	0.0322	0.0039	0.0380

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
50	29	36	26B	26F	1666	90.74%	0.1509	0.1273	-5693.3	0.0000	0.0232	0.0264	0.0000	0.0212
51	29	36	26C	26F	1664	90.63%	0.1586	0.1352	-5679.0	0.0000	0.0059	0.0332	0.0000	0.1700
52	29	36	26D	26F	1666	90.74%	0.1467	0.1230	-5697.5	0.0000	0.0135	0.0310	0.0000	0.1971
53	29	36	26E	26F	1666	90.74%	0.1421	0.1182	-5701.9	0.0000	0.0068	0.0505	0.0009	0.0642
54	29	36	26G	26F	1664	90.63%	0.1453	0.1215	-5691.0	0.0000	0.0280	0.0104	0.0000	0.1408
55	32	30	26A	26F	1670	90.96%	0.1480	0.1244	-5707.0	0.0000	0.0062	0.0004	0.0091	0.1394
56	32	30	26B	26F	1672	91.07%	0.1564	0.1331	-5705.0	0.0000	0.0113	0.0024	0.0000	0.0721
57	32	30	26C	26F	1670	90.96%	0.1610	0.1378	-5693.8	0.0000	0.0261	0.0022	0.0000	0.2740
58	32	30	26D	26F	1672	91.07%	0.1522	0.1287	-5709.2	0.0000	0.0204	0.0006	0.0003	0.3305
59	32	30	26E	26F	1672	91.07%	0.1483	0.1247	-5713.1	0.0000	0.0088	0.0007	0.0050	0.1435
60	32	30	26G	26F	1671	91.01%	0.1495	0.1259	-5707.6	0.0000	0.0180	0.0011	0.0004	0.2689
61	32	31	26A	26F	1669	90.90%	0.1419	0.1181	-5710.1	0.0000	0.0013	0.0496	0.0087	0.0845
62	32	31	26B	26F	1672	91.07%	0.1522	0.1288	-5710.2	0.0000	0.0035	0.0695	0.0000	0.0512
63	32	31	26C	26F	1670	90.96%	0.1562	0.1328	-5699.6	0.0000	0.0082	0.1718	0.0000	0.2076
64	32	31	26D	26F	1672	91.07%	0.1468	0.1232	-5715.6	0.0000	0.0054	0.0806	0.0004	0.2525
65	32	31	26E	26F	1672	91.07%	0.1420	0.1183	-5720.2	0.0000	0.0019	0.1067	0.0105	0.0926
66	32	31	26G	26F	1670	90.96%	0.1448	0.1211	-5709.7	0.0000	0.0065	0.0462	0.0002	0.1846
67	32	36	26A	26F	1666	90.74%	0.1435	0.1197	-5700.3	0.0006	0.0233	0.0950	0.0051	0.0950
68	32	36	26B	26F	1668	90.85%	0.1543	0.1308	-5696.1	0.0000	0.0017	0.0163	0.0000	0.0555
69	32	36	26C	26F	1666	90.74%	0.1594	0.1360	-5684.3	0.0000	0.0050	0.0163	0.0000	0.2404
70	32	36	26D	26F	1668	90.85%	0.1489	0.1253	-5701.4	0.0000	0.0030	0.0182	0.0001	0.2907
71	32	36	26E	26F	1668	90.85%	0.1439	0.1201	-5706.3	0.0000	0.0010	0.0268	0.0051	0.1075
72	32	36	26G	26F	1667	90.80%	0.1474	0.1237	-5698.5	0.0000	0.0038	0.0071	0.0000	0.2182
73	33A	30	26A	26F	1672	91.07%	0.1428	0.1191	-5719.7	0.0000	0.5466	0.0000	0.0075	0.0947
74	33A	30	26B	26F	1674	91.18%	0.1517	0.1283	-5717.3	0.0000	0.5398	0.0004	0.0000	0.0468
75	33A	30	26C	26F	1672	91.07%	0.1573	0.1340	-5705.0	0.0000	0.6171	0.0005	0.0000	0.2304
76	33A	30	26D	26F	1674	91.18%	0.1480	0.1244	-5721.0	0.0000	0.6294	0.0001	0.0001	0.2749
77	33A	30	26E	26F	1674	91.18%	0.1436	0.1199	-5725.3	0.0000	0.6104	0.0001	0.0029	0.1094
78	33A	30	26G	26F	1673	91.12%	0.1460	0.1224	-5718.6	0.0000	0.5113	0.0003	0.0001	0.2368
79	33A	31	26A	26F	1671	91.01%	0.1352	0.1112	-5724.6	0.0000	0.2788	0.0218	0.0074	0.0579
80	33A	31	26B	26F	1674	91.18%	0.1461	0.1225	-5723.8	0.0000	0.3375	0.0398	0.0000	0.0343
81	33A	31	26C	26F	1672	91.07%	0.1511	0.1276	-5712.1	0.0000	0.4039	0.1199	0.0000	0.1788
82	33A	31	26D	26F	1674	91.18%	0.1412	0.1174	-5728.6	0.0000	0.3700	0.0485	0.0002	0.2169
83	33A	31	26E	26F	1674	91.18%	0.1359	0.1120	-5733.7	0.0000	0.3166	0.0552	0.0062	0.0733
84	33A	31	26G	26F	1672	91.07%	0.1406	0.1168	-5721.3	0.0000	0.2613	0.0247	0.0000	0.1714
85	33A	36	26A	26F	1668	90.85%	0.1362	0.1122	-5715.0	0.0000	0.2262	0.0229	0.0038	0.0647
86	33A	36	26B	26F	1670	90.96%	0.1477	0.1225	-5710.1	0.0000	0.2622	0.0299	0.0000	0.0371
87	33A	36	26C	26F	1668	90.85%	0.1539	0.1305	-5697.3	0.0000	0.3495	0.0206	0.0000	0.2090
88	33A	36	26D	26F	1670	90.96%	0.1429	0.1192	-5714.8	0.0000	0.3059	0.0205	0.0001	0.2530
89	33A	36	26E	26F	1670	90.96%	0.1372	0.1133	-5720.4	0.0000	0.2683	0.0277	0.0027	0.0852
90	33A	36	26G	26F	1669	90.90%	0.1428	0.1190	-5710.6	0.0000	0.2183	0.0066	0.0000	0.2019
91	33B	30	26A	26F	1653	90.03%	0.1443	0.1203	-5657.4	0.0000	0.4934	0.0000	0.0037	0.0788
92	33B	30	26B	26F	1655	90.14%	0.1521	0.1284	-5656.1	0.0000	0.7350	0.0003	0.0000	0.0309
93	33B	30	26C	26F	1653	90.03%	0.1591	0.1355	-5642.6	0.0000	0.6193	0.0004	0.0000	0.1869
94	33B	30	26D	26F	1655	90.14%	0.1488	0.1250	-5659.3	0.0000	0.7148	0.0001	0.0001	0.2383
95	33B	30	26E	26F	1655	90.14%	0.1451	0.1212	-5662.9	0.0000	0.4477	0.0001	0.0012	0.0944
96	33B	30	26G	26F	1654	90.09%	0.1474	0.1235	-5656.4	0.0000	0.5554	0.0002	0.0000	0.2033
97	33B	31	26A	26F	1652	89.98%	0.1361	0.1119	-5662.7	0.0000	0.3469	0.0195	0.0045	0.0420
98	33B	31	26B	26F	1655	90.14%	0.1464	0.1226	-5662.6	0.0000	0.5638	0.0268	0.0000	0.0196

PCTFAT

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
99	33B	31	26C	26F	1653	90.03%	0.1528	0.1290	-5649.7	0.0000	0.5243	0.0956	0.0000	0.1335
100	33B	31	26D	26F	1655	90.14%	0.1419	0.1179	-5667.0	0.0000	0.5376	0.0370	0.0001	0.1739
101	33B	31	26E	26F	1655	90.14%	0.1373	0.1131	-5671.5	0.0000	0.2886	0.0515	0.0026	0.0565
102	33B	31	26G	26F	1653	90.03%	0.1416	0.1175	-5659.5	0.0000	0.4139	0.0198	0.0000	0.1364
103	33B	36	26A	26F	1649	89.81%	0.1370	0.1127	-5653.3	0.0000	0.3424	0.0246	0.0021	0.0477
104	33B	36	26B	26F	1651	89.92%	0.1477	0.1238	-5649.3	0.0000	0.5887	0.0165	0.0000	0.0213
105	33B	36	26C	26F	1649	89.81%	0.1554	0.1317	-5635.1	0.0000	0.5457	0.0184	0.0000	0.1592
106	33B	36	26D	26F	1651	89.92%	0.1433	0.1193	-5653.5	0.0000	0.5686	0.0192	0.0000	0.2056
107	33B	36	26E	26F	1651	89.92%	0.1383	0.1142	-5658.3	0.0000	0.2953	0.0299	0.0010	0.0672
108	33B	36	26G	26F	1650	89.87%	0.1437	0.1196	-5648.9	0.0000	0.4036	0.0068	0.0000	0.1645
109	34	30	26A	26F	1669	90.90%	0.1522	0.1287	-5699.6	0.0000	0.0001	0.0008	0.0150	0.1225
110	34	30	26B	26F	1672	91.07%	0.1609	0.1376	-5700.9	0.0000	0.0001	0.0034	0.0000	0.0640
111	34	30	26C	26F	1670	90.96%	0.1669	0.1438	-5688.1	0.0000	0.0001	0.0049	0.0000	0.2926
112	34	30	26D	26F	1672	91.07%	0.1573	0.1340	-5704.4	0.0000	0.0001	0.0013	0.0003	0.3245
113	34	30	26E	26F	1672	91.07%	0.1536	0.1302	-5708.1	0.0000	0.0001	0.0013	0.0050	0.1482
114	34	30	26G	26F	1670	90.96%	0.1517	0.1282	-5702.0	0.0000	0.0013	0.0010	0.0050	0.2059
115	34	31	26A	26F	1669	90.90%	0.1480	0.1244	-5704.7	0.0000	0.0000	0.0284	0.0174	0.0899
116	34	31	26B	26F	1672	91.07%	0.1580	0.1347	-5704.7	0.0000	0.0000	0.0409	0.0000	0.0513
117	34	31	26C	26F	1670	90.96%	0.1635	0.1403	-5692.5	0.0000	0.0000	0.1267	0.0000	0.2479
118	34	31	26D	26F	1672	91.07%	0.1535	0.1301	-5709.1	0.0000	0.0000	0.0561	0.0004	0.2715
119	34	31	26E	26F	1672	91.07%	0.1492	0.1256	-5713.4	0.0000	0.0000	0.0683	0.0115	0.1114
120	34	31	26G	26F	1670	90.96%	0.1483	0.1247	-5706.4	0.0000	0.0001	0.0236	0.0044	0.1571
121	34	36	26A	26F	1666	90.74%	0.1516	0.1280	-5692.1	0.0000	0.0000	0.0021	0.0121	0.0979
122	34	36	26B	26F	1669	90.90%	0.1621	0.1389	-5691.5	0.0000	0.0000	0.0016	0.0000	0.0573
123	34	36	26C	26F	1667	90.80%	0.1687	0.1456	-5678.2	0.0000	0.0000	0.0020	0.0000	0.2865
124	34	36	26D	26F	1669	90.90%	0.1578	0.1344	-5695.8	0.0000	0.0000	0.0020	0.0002	0.3149
125	34	36	26E	26F	1669	90.90%	0.1530	0.1290	-5700.5	0.0000	0.0000	0.0030	0.0069	0.1319
126	34	36	26G	26F	1667	90.80%	0.1525	0.1289	-5693.2	0.0000	0.0000	0.0008	0.0025	0.1846
127	35	30	26A	26F	1657	90.25%	0.1452	0.1214	-5656.4	0.0000	0.0817	0.0001	0.0084	0.0923
128	35	30	26B	26f	1660	90.41%	0.1558	0.1322	-5655.9	0.0000	0.0477	0.0010	0.0000	0.0595
129	35	30	26C	26F	1658	90.31%	0.1620	0.1386	-5643.0	0.0000	0.0429	0.0014	0.0000	0.2798
130	35	30	26D	26F	1660	90.41%	0.1501	0.1264	-5661.4	0.0000	0.1285	0.0002	0.0003	0.2867
131	35	30	26E	26F	1660	90.41%	0.1468	0.1230	-5664.7	0.0000	0.0780	0.0002	0.0022	0.1199
132	35	30	26G	26F	1658	90.31%	0.1493	0.1255	-5654.4	0.0000	0.1049	0.0003	0.0000	0.2242
133	35	31	26A	26F	1657	90.25%	0.1381	0.1140	-5664.2	0.0000	0.0152	0.0289	0.0048	0.0608
134	35	31	26B	26F	1660	90.41%	0.1505	0.1268	-5662.1	0.0000	0.0117	0.0593	0.0000	0.0441
135	35	31	26C	26F	1658	90.31%	0.1564	0.1328	-5649.6	0.0000	0.0100	0.1652	0.0000	0.2171
136	35	31	26D	26F	1660	90.41%	0.1437	0.1198	-5668.7	0.0000	0.0268	0.0551	0.0002	0.2250
137	35	31	26E	26F	1660	90.41%	0.1394	0.1154	-5672.9	0.0000	0.0149	0.0852	0.0039	0.0785
138	35	31	26G	26F	1658	90.31%	0.1433	0.1194	-5661.2	0.0000	0.0397	0.0388	0.0000	0.1593
139	35	36	26A	26F	1653	90.03%	0.1437	0.1197	-5646.8	0.0000	0.0008	0.0000	0.0034	0.0707
140	35	36	26B	26F	1656	90.20%	0.1564	0.1328	-5644.2	0.0000	0.0008	0.0001	0.0000	0.0527
141	35	36	26C	26F	1654	90.09%	0.1636	0.1402	-5630.4	0.0000	0.0008	0.0001	0.0000	0.2659
142	35	36	26D	26F	1656	90.20%	0.1504	0.1266	-5650.1	0.0000	0.0011	0.0000	0.0001	0.2835
143	35	36	26E	26F	1656	90.20%	0.1452	0.1213	-5655.1	0.0000	0.0009	0.0001	0.0023	0.0974
144	35	36	26G	26F	1654	90.09%	0.1488	0.1250	-5643.8	0.0000	0.0056	0.0001	0.0000	0.1869
145	37	30	26A	26F	1670	90.96%	0.1480	0.1402	-5692.4	0.0000	0.0000	0.0005	0.0108	0.0389
146	37	30	26B	26F	1673	91.12%	0.1700	0.1470	-5695.6	0.0000	0.0000	0.0030	0.0000	0.0183
147	37	30	26C	26F	1671	91.01%	0.1750	0.1521	-5683.8	0.0000	0.0000	0.0038	0.0000	0.1180

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
148	37	30	26D	26F	1673	91.12%	0.1678	0.1447	-5697.8	0.0000	0.0000	0.0011	0.0003	0.1482
149	37	30	26E	26F	1673	91.12%	0.1630	0.1399	-5702.5	0.0000	0.0000	0.0009	0.0090	0.0471
150	37	30	26G	26F	1671	91.01%	0.1659	0.1428	-5691.9	0.0000	0.0000	0.0022	0.0001	0.0990
151	37	31	26A	26F	1670	90.96%	0.1576	0.1342	-5699.2	0.0000	0.0000	0.0613	0.0092	0.0201
152	37	31	26B	26F	1673	91.12%	0.1657	0.1427	-5700.8	0.0000	0.0000	0.0846	0.0000	0.0107
153	37	31	26C	26F	1671	91.01%	0.1704	0.1474	-5689.5	0.0000	0.0000	0.2134	0.0000	0.0771
154	37	31	26D	26F	1673	91.12%	0.1627	0.1396	-5703.8	0.0000	0.0000	0.1037	0.0003	0.0997
155	37	31	26E	26F	1673	91.12%	0.1570	0.1337	-5709.5	0.0000	0.0000	0.1205	0.0168	0.0250
156	37	31	26G	26F	1671	91.01%	0.1620	0.1388	-5696.7	0.0000	0.0000	0.0637	0.0000	0.0629
157	37	36	26A	26F	1666	90.74%	0.1585	0.1352	-5686.2	0.0000	0.0000	0.0732	0.0051	0.0204
158	37	36	26B	26F	1669	90.90%	0.1672	0.1441	-5687.3	0.0000	0.0000	0.0537	0.0000	0.0109
159	37	36	26C	26F	1667	90.80%	0.1729	0.1499	-5647.9	0.0000	0.0000	0.0614	0.0000	0.0896
160	37	36	26D	26F	1669	90.90%	0.1644	0.1413	-5690.1	0.0000	0.0000	0.0635	0.0001	0.1164
161	37	36	26E	26F	1669	90.90%	0.1583	0.1350	-5696.2	0.0000	0.0000	0.0834	0.0079	0.0285
162	37	36	26G	26F	1667	90.80%	0.1639	0.1407	-5682.7	0.0000	0.0000	0.0245	0.0000	0.0698
MAX					1674	91.18%	0.1750	0.1521	-5630.39	0.0006	0.7350	0.2134	0.0209	0.3305
MIN					1649	89.81%	0.1352	0.1112	-5745.00	0.0000	0.0000	0.0000	0.0000	0.0107

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Table A.2. Combinations of Avoidance, Modification, Substitution, and Replacement:
Dependent Variable: Percent of Calories from Total Fat, 1995.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1	27	30	26A	26F	1800	92.98%	0.1682	0.1468	-6106.2	0.0000	0.0000	0.0000	0.0030	0.0913
2	27	30	26B	26F	1797	92.82%	0.1799	0.1588	-6084.5	0.0000	0.0000	0.0000	0.0000	0.0900
3	27	30	26C	26F	1796	92.77%	0.1709	0.1496	-6091.4	0.0000	0.0000	0.0000	0.0003	0.1495
4	27	30	26D	26F	1798	92.87%	0.1661	0.1447	-6100.4	0.0000	0.0000	0.0000	0.0283	0.0924
5	27	30	26E	26F	1800	92.98%	0.1661	0.1447	-6108.2	0.0000	0.0000	0.0000	0.0389	0.0885
6	27	30	26G	26F	1799	92.92%	0.1657	0.1443	-6104.3	0.0000	0.0000	0.0000	0.0472	0.2291
7	27	31	26A	26F	1800	92.98%	0.1514	0.1296	-6123.8	0.0000	0.0000	0.1606	0.0014	0.0547
8	27	31	26B	26F	1797	92.82%	0.1652	0.1437	-6100.1	0.0000	0.0000	0.2615	0.0000	0.0466
9	27	31	26C	26F	1796	92.77%	0.1558	0.1341	-6107.2	0.0000	0.0000	0.1415	0.0000	0.0995
10	27	31	26D	26F	1798	92.87%	0.1504	0.1286	-6116.8	0.0000	0.0000	0.1140	0.0042	0.0581
11	27	31	26E	26F	1800	92.98%	0.1506	0.1288	-6124.3	0.0000	0.0000	0.1082	0.0051	0.0575
12	27	31	26G	26F	1799	92.92%	0.1495	0.1277	-6121.2	0.0000	0.0000	0.1093	0.0184	0.1724
13	27	36	26A	26F	1789	92.41%	0.1528	0.1309	-6079.4	0.0000	0.0000	0.0276	0.0012	0.0344
14	27	36	26B	26F	1786	92.25%	0.1674	0.1458	-6055.0	0.0000	0.0000	0.0114	0.0000	0.0487
15	27	36	26C	26F	1785	92.20%	0.1572	0.1354	-6062.9	0.0000	0.0000	0.0149	0.0000	0.0732
16	27	36	26D	26F	1787	92.30%	0.1511	0.1292	-6073.2	0.0000	0.0000	0.0202	0.0085	0.0449
17	27	36	26E	26F	1789	92.41%	0.1521	0.1302	-6079.9	0.0000	0.0000	0.0149	0.0046	0.0420
18	27	36	26G	26F	1788	92.36%	0.1506	0.1286	-6077.3	0.0000	0.0000	0.0175	0.0269	0.1357
19	28	30	26A	26F	1798	92.87%	0.1587	0.1350	-6112.3	0.0000	0.0022	0.0000	0.0022	0.0636
20	28	30	26B	26F	1795	92.72%	0.1701	0.1488	-6088.9	0.0000	0.0035	0.0000	0.0000	0.0631
21	28	30	26C	26F	1795	92.72%	0.1603	0.1387	-6099.6	0.0000	0.0037	0.0000	0.0001	0.1105
22	28	30	26D	26F	1796	92.77%	0.1549	0.1332	-6106.2	0.0000	0.0043	0.0000	0.0217	0.0660
23	28	30	26E	26F	1798	92.87%	0.1541	0.1324	-6114.8	0.0000	0.0033	0.0000	0.0547	0.0552
24	28	30	26G	26F	1797	92.82%	0.1535	0.1318	-6111.1	0.0000	0.0044	0.0000	0.0598	0.1499
25	28	31	26A	26F	1798	92.87%	0.1362	0.1140	-6133.5	0.0000	0.0002	0.0745	0.0009	0.0323
26	28	31	26B	26F	1795	92.72%	0.1520	0.1302	-6107.9	0.0000	0.0004	0.1931	0.0000	0.0263
27	28	31	26C	26F	1795	92.72%	0.1414	0.1193	-6119.1	0.0000	0.0004	0.0930	0.0000	0.0621
28	28	31	26D	26F	1796	92.77%	0.1359	0.1136	-6125.8	0.0000	0.0004	0.0500	0.0017	0.0373
29	28	31	26E	26F	1798	92.87%	0.1346	0.1124	-6134.9	0.0000	0.0004	0.0607	0.0076	0.0296
30	28	31	26G	26F	1797	92.82%	0.1333	0.1110	-6132.0	0.0000	0.0005	0.0508	0.0232	0.0958
31	28	36	26A	26F	1787	92.30%	0.1376	0.1154	-6089.1	0.0000	0.0005	0.0272	0.0008	0.0206
32	28	36	26B	26F	1784	92.15%	0.1545	0.1326	-6062.5	0.0000	0.0012	0.0107	0.0000	0.0270
33	28	36	26C	26F	1784	92.15%	0.1435	0.1213	-6074.2	0.0000	0.0012	0.0132	0.0000	0.0495
34	28	36	26D	26F	1785	92.20%	0.1367	0.1143	-6082.1	0.0000	0.0012	0.0189	0.0040	0.0292
35	28	36	26E	26F	1787	92.30%	0.1366	0.1143	-6089.9	0.0000	0.0010	0.0129	0.0049	0.0223
36	28	36	26G	26F	1786	92.25%	0.1345	0.1122	-6087.8	0.0000	0.0013	0.0168	0.0325	0.0750
37	29	30	26A	26F	1799	92.92%	0.1644	0.1429	-6106.9	0.0000	0.0000	0.0000	0.0047	0.0416
38	29	30	26B	26F	1796	92.77%	0.1793	0.1582	-6081.8	0.0000	0.0000	0.0000	0.0000	0.0482
39	29	30	26C	26F	1795	92.72%	0.1702	0.1488	-6088.9	0.0000	0.0000	0.0000	0.0000	0.0891
40	29	30	26D	26F	1797	92.82%	0.1627	0.1412	-6100.6	0.0000	0.0000	0.0000	0.0340	0.0460
41	29	30	26E	26F	1799	92.92%	0.1624	0.1409	-6108.7	0.0000	0.0000	0.0000	0.0494	0.0400
42	29	30	26G	26F	1798	92.87%	0.1620	0.1404	-6105.0	0.0000	0.0000	0.0000	0.0511	0.1112
43	29	31	26A	26F	1799	92.92%	0.1441	0.1221	-6128.1	0.0000	0.0000	0.0554	0.0018	0.0182
44	29	31	26B	26F	1796	92.77%	0.1616	0.1400	-6100.5	0.0000	0.0000	0.1854	0.0000	0.0183
45	29	31	26C	26F	1795	92.72%	0.1520	0.1302	-6107.9	0.0000	0.0000	0.0880	0.0000	0.0451
46	29	31	26D	26F	1797	92.82%	0.1440	0.1220	-6120.2	0.0000	0.0000	0.0435	0.0028	0.0231
47	29	31	26E	26F	1799	92.92%	0.1433	0.1213	-6128.7	0.0000	0.0000	0.0518	0.0063	0.0191
48	29	31	26G	28F	1798	92.87%	0.1421	0.1200	-6125.7	0.0000	0.0000	0.0452	0.0163	0.0638
49	29	36	26A	28F	1788	92.36%	0.1460	0.1239	-6083.3	0.0000	0.0000	0.0318	0.0018	0.0125
50	29	36	26B	26F	1785	92.20%	0.1647	0.1431	-6054.5	0.0000	0.0000	0.0149	0.0000	0.0207

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
51	29	36	26C	26F	1784	92.15%	0.1544	0.1325	-6062.6	0.0000	0.0000	0.0198	0.0000	0.0383
52	29	36	26D	26F	1786	92.25%	0.1455	0.1234	-6075.7	0.0000	0.0000	0.0235	0.0055	0.0196
53	29	36	26E	26F	1788	92.36%	0.1459	0.1239	-6083.1	0.0000	0.0000	0.0157	0.0037	0.0160
54	29	36	26G	26F	1787	92.30%	0.1438	0.1217	-6081.0	0.0000	0.0000	0.0221	0.0259	0.0517
55	32	30	26A	26F	1799	92.92%	0.1656	0.1442	-6105.7	0.0000	0.0000	0.0000	0.0061	0.0914
56	32	30	26B	26F	1796	92.77%	0.1779	0.1567	-6083.6	0.0000	0.0000	0.0000	0.0000	0.0879
57	32	30	26C	26F	1795	92.72%	0.1691	0.1477	-6090.2	0.0000	0.0000	0.0000	0.0004	0.1391
58	32	30	26D	26F	1797	92.82%	0.1639	0.1424	-6099.6	0.0000	0.0000	0.0000	0.0358	0.0989
59	32	30	26E	26F	1799	92.92%	0.1631	0.1416	-6108.2	0.0000	0.0000	0.0000	0.1179	0.0814
60	32	30	26G	26F	1798	92.87%	0.1635	0.1421	-6103.5	0.0000	0.0000	0.0000	0.0512	0.2218
61	32	31	26A	26F	1799	92.92%	0.1482	0.1263	-6124.0	0.0000	0.0000	0.1382	0.0022	0.0484
62	32	31	26B	26F	1796	92.77%	0.1621	0.1405	-6100.3	0.0000	0.0000	0.3834	0.0000	0.0379
63	32	31	26C	26F	1795	92.72%	0.1530	0.1312	-6107.0	0.0000	0.0000	0.1959	0.0000	0.0792
64	32	31	26D	26F	1797	92.82%	0.1477	0.1258	-6116.5	0.0000	0.0000	0.1108	0.0035	0.0572
65	32	31	26E	26F	1799	92.92%	0.1463	0.1244	-6125.7	0.0000	0.0000	0.1271	0.0248	0.0449
66	32	31	26G	26F	1798	92.87%	0.1464	0.1245	-6121.3	0.0000	0.0000	0.1366	0.0189	0.1510
67	32	36	26A	26F	1788	92.36%	0.1479	0.1259	-6081.5	0.0000	0.0000	0.0803	0.0022	0.0352
68	32	36	26B	26F	1785	92.20%	0.1632	0.1415	-6056.4	0.0000	0.0000	0.0323	0.0000	0.0440
69	32	36	26C	26F	1784	92.15%	0.1534	0.1315	-6063.9	0.0000	0.0000	0.0418	0.0000	0.0715
70	32	36	26D	26F	1786	92.25%	0.1469	0.1248	-6074.5	0.0000	0.0000	0.0627	0.0080	0.0494
71	32	36	26E	26F	1788	92.36%	0.1467	0.1246	-6082.5	0.0000	0.0000	0.0405	0.0160	0.0380
72	32	36	26G	26F	1787	92.30%	0.1461	0.1240	-6078.9	0.0000	0.0000	0.0605	0.0278	0.1339
73	33A	30	26A	26F	1799	92.92%	0.1538	0.1320	-6118.6	0.0000	0.0509	0.0000	0.0031	0.1160
74	33A	30	26B	26F	1796	92.77%	0.1672	0.1458	-6095.3	0.0000	0.0896	0.0000	0.0000	0.1029
75	33A	30	26C	26F	1795	92.72%	0.1583	0.1366	-6102.0	0.0000	0.0392	0.0000	0.0001	0.1908
76	33A	30	26D	26F	1797	92.82%	0.1529	0.1311	-6111.6	0.0000	0.0548	0.0000	0.0130	0.1208
77	33A	30	26E	26F	1799	92.92%	0.1515	0.1297	-6120.8	0.0000	0.0593	0.0000	0.0410	0.1007
78	33A	30	26G	26F	1798	92.87%	0.1512	0.1294	-6118.9	0.0000	0.0701	0.0000	0.0470	0.2454
79	33A	31	26A	26F	1799	92.92%	0.1316	0.1093	-6141.5	0.0000	0.0153	0.1003	0.0011	0.0618
80	33A	31	26B	26F	1796	92.77%	0.1475	0.1256	-6115.9	0.0000	0.0388	0.2199	0.0000	0.0453
81	33A	31	26C	26F	1795	92.72%	0.1382	0.1160	-6122.8	0.0000	0.0122	0.1275	0.0000	0.1172
82	33A	31	26D	26F	1797	92.82%	0.1324	0.1101	-6132.6	0.0000	0.0197	0.0725	0.0008	0.0745
83	33A	31	26E	26F	1799	92.92%	0.1305	0.1082	-6142.3	0.0000	0.0232	0.0734	0.0044	0.0583
84	33A	31	26G	26F	1798	92.87%	0.1259	0.1071	-6139.2	0.0000	0.0270	0.0737	0.0148	0.1705
85	33A	36	26A	26F	1788	92.36%	0.1349	0.1125	-6095.1	0.0000	0.0089	0.0163	0.0012	0.0458
86	33A	36	26B	26F	1785	92.20%	0.1517	0.1298	-6068.6	0.0000	0.0244	0.0064	0.0000	0.0584
87	33A	36	26C	26F	1784	92.15%	0.1420	0.1198	-6075.9	0.0000	0.0074	0.0082	0.0000	0.1097
88	33A	36	26D	26F	1786	92.25%	0.1350	0.1126	-6087.0	0.0000	0.0108	0.0124	0.0023	0.0670
89	33A	36	26E	26F	1788	92.36%	0.1343	0.1119	-6095.5	0.0000	0.0130	0.0078	0.0038	0.0530
90	33A	36	26G	26F	1787	92.30%	0.1328	0.1101	-6093.0	0.0000	0.0134	0.0098	0.0252	0.1576
91	33B	30	26A	26F	1784	92.15%	0.1583	0.1365	-6066.7	0.0000	0.0008	0.0000	0.0041	0.0898
92	33B	30	26B	26F	1781	91.99%	0.1712	0.1497	-6044.0	0.0000	0.0014	0.0000	0.0000	0.0827
93	33B	30	26C	26F	1780	91.94%	0.1628	0.1409	-6050.3	0.0000	0.0005	0.0000	0.0001	0.1471
94	33B	30	26D	26F	1782	92.05%	0.1571	0.1352	-6060.0	0.0000	0.0008	0.0000	0.0193	0.0951
95	33B	30	26E	26F	1784	92.15%	0.1561	0.1342	-6068.9	0.0000	0.0007	0.0000	0.0574	0.0840
96	33B	30	26G	26F	1783	92.10%	0.1552	0.1333	-6065.6	0.0000	0.0010	0.0000	0.0860	0.1893
97	33B	31	26A	26F	1784	92.15%	0.1380	0.1157	-6087.5	0.0000	0.0001	0.1040	0.0017	0.0489
98	33B	31	26B	26F	1781	91.99%	0.1533	0.1313	-6062.7	0.0000	0.0002	0.2218	0.0000	0.0359
99	33B	31	26C	26F	1780	91.94%	0.1443	0.1221	-6069.2	0.0000	0.0001	0.1224	0.0000	0.0893
100	33B	31	26D	26F	1782	92.05%	0.1387	0.1163	-6078.9	0.0000	0.0001	0.0765	0.0015	0.0580

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
101	33B	31	26E	26F	1784	92.15%	0.1369	0.1146	-6088.5	0.0000	0.0001	0.0824	0.0080	0.0484
102	33B	31	26G	26F	1783	92.10%	0.1353	0.1129	-6085.9	0.0000	0.0001	0.0733	0.0342	0.1258
103	33B	36	26A	26F	1773	91.58%	0.1409	0.1185	-6041.8	0.0000	0.0001	0.0138	0.0018	0.0357
104	33B	36	26B	26F	1770	91.43%	0.1570	0.1350	-6016.0	0.0000	0.0002	0.0051	0.0000	0.0431
105	33B	36	26C	26F	1769	91.37%	0.1476	0.1254	-6022.9	0.0000	0.0001	0.0061	0.0000	0.0805
106	33B	36	26D	26F	1771	91.48%	0.1409	0.1185	-6033.7	0.0000	0.0001	0.0103	0.0034	0.0521
107	33B	36	26E	26F	1773	91.58%	0.1404	0.1180	-6042.1	0.0000	0.0001	0.0059	0.0052	0.0429
108	33B	36	26G	26F	1772	91.53%	0.1378	0.1154	-6040.4	0.0000	0.0001	0.0083	0.0546	0.1074
109	34	30	26A	26F	1798	92.87%	0.1579	0.1362	-6101.5	0.0000	0.0203	0.0000	0.0047	0.0322
110	34	30	26B	26F	1795	92.72%	0.1721	0.1508	-6077.3	0.0000	0.0478	0.0000	0.0000	0.0372
111	34	30	26C	26F	1794	92.67%	0.1622	0.1406	-6085.1	0.0000	0.0281	0.0000	0.0001	0.0647
112	34	30	26D	26F	1796	92.77%	0.1565	0.1349	-6094.9	0.0000	0.0346	0.0000	0.0202	0.0353
113	34	30	26E	26F	1798	92.87%	0.1560	0.1343	-6103.2	0.0000	0.0218	0.0000	0.0479	0.0307
114	34	30	26G	26F	1797	92.82%	0.1543	0.1326	-6100.7	0.0000	0.0999	0.0000	0.1437	0.0756
115	34	31	26A	26F	1798	92.87%	0.1395	0.1174	-6120.5	0.0000	0.0007	0.0633	0.0026	0.0166
116	34	31	26B	26F	1795	92.72%	0.1557	0.1340	-6094.4	0.0000	0.0032	0.1648	0.0000	0.0182
117	34	31	26C	26F	1794	92.67%	0.1455	0.1235	-6102.4	0.0000	0.0011	0.0792	0.0000	0.0365
118	34	31	26D	26F	1796	92.77%	0.1395	0.1174	-6112.4	0.0000	0.0018	0.0386	0.0021	0.0205
119	34	31	26E	26F	1798	92.87%	0.1388	0.1167	-6121.0	0.0000	0.0009	0.0468	0.0074	0.0174
120	34	31	26G	26F	1797	92.82%	0.1351	0.1129	-6120.5	0.0000	0.0100	0.0398	0.1704	0.0411
121	34	36	26A	26F	1788	92.36%	0.1397	0.1174	-6081.7	0.0000	0.0014	0.0509	0.0022	0.0100
122	34	36	26B	26F	1785	92.20%	0.1561	0.1343	-6055.8	0.0000	0.0089	0.0238	0.0000	0.0140
123	34	36	26C	26F	1784	92.15%	0.1460	0.1239	-6063.3	0.0000	0.0032	0.0308	0.0000	0.0273
124	34	36	26D	26F	1786	92.25%	0.1391	0.1168	-6074.3	0.0000	0.0039	0.0361	0.0053	0.0361
125	34	36	26E	26F	1788	92.36%	0.1391	0.1169	-6082.1	0.0000	0.0028	0.0324	0.0069	0.0117
126	34	36	26G	26F	1787	92.30%	0.1358	0.1135	-6081.2	0.0000	0.0144	0.0213	0.1166	0.0325
127	35	30	26A	26F	1781	91.99%	0.1545	0.1325	-6051.3	0.0000	0.0005	0.0000	0.0031	0.0769
128	35	30	26B	26f	1778	91.84%	0.1692	0.1476	-6026.8	0.0000	0.0004	0.0000	0.0000	0.0587
129	35	30	26C	26F	1777	91.79%	0.1577	0.1358	-6036.1	0.0000	0.0006	0.0000	0.0002	0.1051
130	35	30	26D	26F	1779	91.89%	0.1526	0.1306	-6045.2	0.0000	0.0005	0.0000	0.0228	0.0755
131	35	30	26E	26F	1781	91.99%	0.1523	0.1303	-6053.3	0.0000	0.0003	0.0000	0.0344	0.0666
132	35	30	26G	26F	1780	91.94%	0.1503	0.1282	-6051.2	0.0000	0.0009	0.0000	0.1674	0.1266
133	35	31	26A	26F	1781	91.99%	0.1384	0.1160	-6067.7	0.0000	0.0000	0.0420	0.0016	0.0442
134	35	31	26B	26F	1778	91.84%	0.1553	0.1334	-6041.1	0.0000	0.0000	0.1114	0.0000	0.0275
135	35	31	26C	26F	1777	91.79%	0.1432	0.1209	-6050.9	0.0000	0.0000	0.0505	0.0000	0.0638
136	35	31	26D	26F	1779	91.89%	0.1378	0.1154	-6060.3	0.0000	0.0000	0.0260	0.0029	0.0460
137	35	31	26E	26F	1781	91.99%	0.1375	0.1151	-6068.4	0.0000	0.0000	0.0327	0.0045	0.0409
138	35	31	26G	26F	1780	91.94%	0.1339	0.1114	-6067.8	0.0000	0.0000	0.0261	0.1414	0.0800
139	35	36	26A	26F	1770	91.43%	0.1390	0.1168	-6024.1	0.0000	0.0000	0.0492	0.0015	0.0317
140	35	36	26B	26F	1767	91.27%	0.1559	0.1339	-5997.8	0.0000	0.0000	0.0448	0.0000	0.0304
141	35	36	26C	26F	1766	91.22%	0.1438	0.1214	-6007.4	0.0000	0.0000	0.0387	0.0000	0.0536
142	35	36	26D	26F	1768	91.32%	0.1377	0.1151	-6017.4	0.0000	0.0000	0.0328	0.0071	0.0374
143	35	36	26E	26F	1770	91.43%	0.1379	0.1154	-6025.0	0.0000	0.0000	0.0438	0.0066	0.0325
144	35	36	26G	26F	1769	91.37%	0.1347	0.1121	-6024.0	0.0000	0.0000	0.0223	0.1213	0.0726
145	37	30	26A	26F	1799	92.92%	0.1705	0.1492	-6100.3	0.0000	0.0000	0.0000	0.0039	0.0572
146	37	30	26B	26F	1796	92.77%	0.1819	0.1608	-6079.0	0.0000	0.0000	0.0000	0.0000	0.0488
147	37	30	26C	26F	1795	92.72%	0.1722	0.1509	-6086.6	0.0000	0.0000	0.0000	0.0012	0.0877
148	37	30	26D	26F	1797	92.82%	0.1697	0.1483	-6093.2	0.0000	0.0000	0.0000	0.0172	0.0596
149	37	30	26E	26F	1799	92.92%	0.1670	0.1456	-6103.9	0.0000	0.0000	0.0000	0.0178	0.0446
150	37	30	26G	26F	1798	92.87%	0.1681	0.1468	-6098.4	0.0000	0.0000	0.0000	0.0445	0.1487

1995 (Total:1936)

						% OF USEABLE				AMSR	A GROUP	M GROUP	S GROUP	R GROUP
COMBINATION	A?	M?	S?	R?	N	OBSERVATIONS	R2	ADJ R2	LLF	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE
151	37	31	26A	26F	1799	92.92%	0.1514	0.1296	-6120.4	0.0000	0.0000	0.1133	0.0017	0.0257
152	37	31	26B	26F	1796	92.77%	0.1648	0.1433	-6097.2	0.0000	0.0000	0.2384	0.0000	0.0179
153	37	31	26C	26F	1795	92.72%	0.1544	0.1327	-6105.3	0.0000	0.0000	0.1191	0.0002	0.0433
154	37	31	26D	26F	1797	92.82%	0.1522	0.1304	-6111.5	0.0000	0.0000	0.0876	0.0018	0.0308
155	37	31	26E	26F	1799	92.92%	0.1485	0.1266	-6123.2	0.0000	0.0000	0.0835	0.0393	0.0208
156	37	31	26G	26F	1798	92.87%	0.1495	0.1277	-6117.8	0.0000	0.0000	0.0918	0.0158	0.0905
157	37	36	26A	26F	1788	92.36%	0.1525	0.1307	-6076.3	0.0000	0.0000	0.0173	0.0019	0.0192
158	37	36	26B	26F	1785	92.20%	0.1673	0.1457	-6051.8	0.0000	0.0000	0.0065	0.0000	0.0215
159	37	36	26C	26F	1784	92.15%	0.1563	0.1345	-6060.6	0.0000	0.0000	0.0081	0.0001	0.0401
160	37	36	26D	26F	1786	92.25%	0.1527	0.1307	-6068.2	0.0000	0.0000	0.0156	0.0045	0.0269
161	37	36	26E	26F	1788	92.36%	0.1502	0.1283	-6078.6	0.0000	0.0000	0.0080	0.0312	0.0182
162	37	36	26G	26F	1787	92.30%	0.1507	0.1287	-6073.8	0.0000	0.0000	0.0132	0.0248	0.0803
MAX					1800	92.98%	0.1819	0.1608	-5997.630	0.0000	0.0999	0.3834	0.1704	0.2454
MIN					1766	91.22%	0.1259	0.1071	-6142.340	0.0000	0.0000	0.0000	0.0000	0.0100

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Table A.5. Combinations of Avoidance, Modification, Substitution, and Replacement.
Dependent Variable: Percent of Calories from Total Fat, 1996.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1	27	30	26A	26F	1730	92.17%	0.1480	0.1253	-5932.6	0.0000	0.0000	0.0000	0.0136	0.0316
2	27	30	26B	26F	1731	92.22%	0.1574	0.1349	-5924.8	0.0000	0.0000	0.0003	0.0000	0.0085
3	27	30	26C	26F	1731	92.22%	0.1556	0.1330	-5927.9	0.0000	0.0000	0.0001	0.0000	0.0249
4	27	30	26D	26F	1730	92.17%	0.1579	0.1354	-5922.4	0.0000	0.0000	0.0003	0.0000	0.0605
5	27	30	26E	26F	1726	91.96%	0.1550	0.1323	-5913.1	0.0000	0.0000	0.0002	0.0001	0.0622
6	27	30	26G	26F	1730	92.17%	0.1461	0.1233	-5933.7	0.0000	0.0000	0.0001	0.0642	0.0651
7	27	31	26A	26F	1731	92.22%	0.1476	0.1248	-5936.0	0.0000	0.0000	0.0001	0.0425	0.0311
8	27	31	26B	26F	1732	92.27%	0.1589	0.1364	-5926.3	0.0000	0.0000	0.0002	0.0000	0.0098
9	27	31	26C	26F	1732	92.27%	0.1550	0.1325	-5931.4	0.0000	0.0000	0.0005	0.0001	0.0246
10	27	31	26D	26F	1731	92.22%	0.1599	0.1375	-5923.3	0.0000	0.0000	0.0001	0.0000	0.0615
11	27	31	26E	26F	1727	92.01%	0.1559	0.1333	-5915.1	0.0000	0.0000	0.0002	0.0001	0.0707
12	27	31	26G	26F	1731	92.22%	0.1477	0.1249	-5935.1	0.0000	0.0000	0.0000	0.0817	0.0755
13	27	36	26A	26F	1710	91.10%	0.1399	0.1166	-5873.8	0.0000	0.0000	0.0800	0.0069	0.0083
14	27	36	26B	26F	1711	91.16%	0.1515	0.1286	-5864.0	0.0000	0.0000	0.1462	0.0000	0.0015
15	27	36	26C	26F	1711	91.16%	0.1489	0.1259	-5867.8	0.0000	0.0000	0.1111	0.0000	0.0054
16	27	36	26D	26F	1710	91.10%	0.1529	0.1300	-5860.7	0.0000	0.0000	0.0719	0.0000	0.0166
17	27	36	26E	26F	1707	90.94%	0.1490	0.1259	-5855.4	0.0000	0.0000	0.1069	0.0000	0.0190
18	27	36	26G	26F	1711	91.16%	0.1390	0.1157	-5877.0	0.0000	0.0000	0.0653	0.0167	0.0240
19	28	30	26A	26F	1730	92.17%	0.1524	0.1298	-5928.1	0.0000	0.0000	0.0001	0.0104	0.0260
20	28	30	26B	26F	1731	92.22%	0.1615	0.1392	-5920.6	0.0000	0.0000	0.0007	0.0000	0.0068
21	28	30	26C	26F	1731	92.22%	0.1596	0.1371	-5923.8	0.0000	0.0000	0.0003	0.0000	0.0188
22	28	30	26D	26F	1730	92.17%	0.1623	0.1399	-5917.9	0.0000	0.0000	0.0007	0.0000	0.0415
23	28	30	26E	26F	1726	91.96%	0.1581	0.1355	-5909.9	0.0000	0.0000	0.0005	0.0002	0.0005
24	28	30	26G	26F	1730	92.17%	0.1502	0.1275	-5929.5	0.0000	0.0000	0.0001	0.0418	0.0548
25	28	31	26A	26F	1731	92.22%	0.1524	0.1298	-5931.1	0.0000	0.0000	0.0001	0.0323	0.0237
26	28	31	26B	26F	1732	92.27%	0.1633	0.1410	-5921.7	0.0000	0.0000	0.0003	0.0000	0.0071
27	28	31	26C	26F	1732	92.27%	0.1595	0.1371	-5926.8	0.0000	0.0000	0.0008	0.0001	0.0175
28	28	31	26D	26F	1731	92.22%	0.1647	0.1424	-5918.4	0.0000	0.0000	0.0001	0.0000	0.0481
29	28	31	26E	26F	1727	92.01%	0.1593	0.1368	-5911.6	0.0000	0.0000	0.0003	0.0003	0.0493
30	28	31	26G	26F	1731	92.22%	0.1521	0.1295	-5930.6	0.0000	0.0000	0.0001	0.0491	0.0611
31	28	36	26A	26F	1710	91.10%	0.1434	0.1203	-5870.3	0.0000	0.0000	0.1207	0.0040	0.0067
32	28	36	26B	26F	1711	91.16%	0.1546	0.1317	-5860.9	0.0000	0.0000	0.1960	0.0000	0.0012
33	28	36	26C	26F	1711	91.16%	0.1519	0.1290	-5864.7	0.0000	0.0000	0.1688	0.0000	0.0040
34	28	36	26D	26F	1710	91.10%	0.1561	0.1333	-5857.4	0.0000	0.0000	0.1181	0.0000	0.0134
35	28	36	26E	26F	1707	90.94%	0.1509	0.1279	-5853.5	0.0000	0.0000	0.1441	0.0000	0.0135
36	28	36	26G	26F	1711	91.16%	0.1421	0.1189	-5873.9	0.0000	0.0000	0.1062	0.0092	0.0198
37	29	30	26A	26F	1730	92.17%	0.1458	0.1229	-5934.9	0.0000	0.0000	0.0000	0.0109	0.0123
38	29	30	26B	26F	1731	92.22%	0.1569	0.1344	-5925.4	0.0000	0.0000	0.0005	0.0000	0.0033
39	29	30	26C	26F	1731	92.22%	0.1545	0.1319	-5929.0	0.0000	0.0002	0.0000	0.0000	0.0098
40	29	30	26D	26F	1730	92.17%	0.1572	0.1347	-5923.1	0.0000	0.0000	0.0005	0.0000	0.0235
41	29	30	26E	26F	1726	91.96%	0.1522	0.1295	-5915.9	0.0000	0.0000	0.0003	0.0001	0.0282
42	29	30	26G	26F	1730	92.17%	0.1431	0.1202	-5936.7	0.0000	0.0000	0.0001	0.0719	0.0245
43	29	31	26A	26F	1731	92.22%	0.1449	0.1221	-5938.7	0.0000	0.0000	0.0001	0.0338	0.0101
44	29	31	26B	26F	1732	92.27%	0.1581	0.1356	-5927.2	0.0000	0.0000	0.0003	0.0000	0.0033
45	29	31	26C	26F	1732	92.27%	0.1540	0.1314	-5932.5	0.0000	0.0000	0.0010	0.0000	0.0085
46	29	31	26D	26F	1731	92.22%	0.1593	0.1369	-5923.9	0.0000	0.0000	0.0001	0.0000	0.0273
47	29	31	26E	26F	1727	92.01%	0.1528	0.1301	-5918.3	0.0000	0.0000	0.0003	0.0001	0.0286
48	29	31	26G	26F	1731	92.22%	0.1443	0.1214	-5938.5	0.0000	0.0000	0.0001	0.0828	0.0251
49	29	36	26A	26F	1710	91.10%	0.1356	0.1122	-5878.0	0.0000	0.0000	0.2003	0.0053	0.0022

PCTFAT

1996 (Total:1877)

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
50	29	36	26B	26F	1711	91.16%	0.1495	0.1265	-5866.1	0.0000	0.0000	0.2947	0.0000	0.0004
51	29	36	26C	26F	1711	91.16%	0.1465	0.1234	-5870.2	0.0000	0.0000	0.2788	0.0000	0.0016
52	29	36	26D	26F	1710	91.10%	0.1508	0.1278	-5862.7	0.0000	0.0000	0.1880	0.0000	0.0062
53	29	36	26E	26F	1707	90.94%	0.1447	0.1215	-5859.7	0.0000	0.0000	0.2377	0.0000	0.0065
54	29	36	26G	26F	1711	91.16%	0.1342	0.1108	-5881.8	0.0000	0.0000	0.1599	0.0169	0.0063
55	32	30	26A	26F	1729	92.12%	0.1559	0.1333	-5921.5	0.0000	0.0000	0.0001	0.0323	0.0304
56	32	30	26B	26F	1730	92.17%	0.1655	0.1432	-5913.4	0.0000	0.0000	0.0009	0.0000	0.0098
57	32	30	26C	26F	1730	92.17%	0.1640	0.1417	-5916.1	0.0000	0.0000	0.0004	0.0000	0.0242
58	32	30	26D	26F	1729	92.12%	0.1663	0.1440	-5910.7	0.0000	0.0000	0.0008	0.0000	0.0476
59	32	30	26E	26F	1725	91.90%	0.1625	0.1400	-5902.3	0.0000	0.0000	0.0004	0.0003	0.0607
60	32	30	26G	26F	1729	92.12%	0.1539	0.1313	-5922.6	0.0000	0.0000	0.0001	0.1346	0.0627
61	32	31	26A	26F	1730	92.17%	0.1537	0.1311	-5926.7	0.0000	0.0000	0.0007	0.0731	0.0253
62	32	31	26B	26F	1731	92.22%	0.1654	0.1431	-5916.5	0.0000	0.0000	0.0017	0.0000	0.0089
63	32	31	26C	26F	1731	92.22%	0.1622	0.1399	-5920.9	0.0000	0.0000	0.0041	0.0000	0.0201
64	32	31	26D	26F	1730	92.17%	0.1665	0.1442	-5913.5	0.0000	0.0000	0.0006	0.0000	0.0484
65	32	31	26E	26F	1726	91.96%	0.1615	0.1390	-5906.3	0.0000	0.0000	0.0015	0.0003	0.0580
66	32	31	26G	26F	1730	92.17%	0.1535	0.1309	-5926.0	0.0000	0.0000	0.0004	0.1400	0.0634
67	32	36	26A	26F	1709	91.05%	0.1473	0.1243	-5863.2	0.0000	0.0000	0.1757	0.0164	0.0076
68	32	36	26B	26F	1710	91.10%	0.1596	0.1369	-5852.7	0.0000	0.0000	0.2561	0.0000	0.0016
69	32	36	26C	26F	1710	91.10%	0.1574	0.1346	-5856.1	0.0000	0.0000	0.2450	0.0000	0.0050
70	32	36	26D	26F	1709	91.05%	0.1611	0.1384	-5849.2	0.0000	0.0000	0.1683	0.0000	0.0145
71	32	36	26E	26F	1706	90.89%	0.1565	0.1336	-5844.8	0.0000	0.0000	0.1838	0.0000	0.0178
72	32	36	26G	26F	1710	91.10%	0.1467	0.1236	-5866.2	0.0000	0.0000	0.1415	0.0329	0.0223
73	33A	30	26A	26F	1730	92.17%	0.1346	0.1115	-5946.1	0.0000	0.5512	0.0000	0.0043	0.0095
74	33A	30	26B	26F	1731	92.22%	0.1473	0.1246	-5935.2	0.0000	0.5144	0.0001	0.0000	0.0020
75	33A	30	26C	26F	1731	92.22%	0.1446	0.1217	-5939.1	0.0000	0.4646	0.0000	0.0000	0.0074
76	33A	30	26D	26F	1730	92.17%	0.1468	0.1240	-5933.7	0.0000	0.3966	0.0000	0.0000	0.0175
77	33A	30	26E	26F	1726	91.96%	0.1424	0.1194	-5925.8	0.0000	0.4476	0.0000	0.0000	0.0231
78	33A	30	26G	26F	1730	92.17%	0.1321	0.1089	-5947.7	0.0000	0.5885	0.0000	0.0257	0.0230
79	33A	31	26A	26F	1731	92.22%	0.1319	0.1087	-5951.8	0.0000	0.4173	0.0000	0.0152	0.0078
80	33A	31	26B	26F	1732	92.27%	0.1474	0.1247	-5938.0	0.0000	0.4044	0.0001	0.0000	0.0020
81	33A	31	26C	26F	1732	92.27%	0.1425	0.1196	-5944.2	0.0000	0.3427	0.0003	0.0000	0.0063
82	33A	31	26D	26F	1731	92.22%	0.1476	0.1249	-5935.9	0.0000	0.3010	0.0000	0.0000	0.0198
83	33A	31	26E	26F	1727	92.01%	0.1417	0.1187	-5929.5	0.0000	0.3468	0.0001	0.0000	0.0236
84	33A	31	26G	26F	1731	92.22%	0.1317	0.1085	-5951.2	0.0000	0.4651	0.0000	0.0308	0.0241
85	33A	36	26A	26F	1710	91.10%	0.1224	0.0987	-5890.9	0.0000	0.4369	0.0680	0.0018	0.0017
86	33A	36	26B	26F	1711	91.16%	0.1386	0.1153	-5876.9	0.0000	0.4254	0.1373	0.0000	0.0003
87	33A	36	26C	26F	1711	91.16%	0.1350	0.1116	-5881.6	0.0000	0.3453	0.1100	0.0000	0.0012
88	33A	36	26D	26F	1710	91.10%	0.1391	0.1158	-5874.5	0.0000	0.3045	0.0598	0.0000	0.0046
89	33A	36	26E	26F	1707	90.94%	0.1333	0.1098	-5871.0	0.0000	0.3581	0.0954	0.0000	0.0055
90	33A	36	26G	26F	1711	91.16%	0.1212	0.0974	-5894.5	0.0000	0.4848	0.0543	0.0050	0.0063
91	33B	30	26A	26F	1719	91.58%	0.1433	0.1202	-5898.8	0.0000	0.0002	0.0000	0.0058	0.0182
92	33B	30	26B	26F	1720	91.64%	0.1539	0.1311	-5890.0	0.0000	0.0012	0.0003	0.0000	0.0043
93	33B	30	26C	26F	1720	91.64%	0.1516	0.1287	-5893.5	0.0000	0.0007	0.0001	0.0000	0.0137
94	33B	30	26D	26F	1719	91.58%	0.1540	0.1313	-5887.9	0.0000	0.0006	0.0003	0.0000	0.0300
95	33B	30	26E	26F	1715	91.37%	0.1492	0.1262	-5880.4	0.0000	0.0014	0.0002	0.0001	0.0313
96	33B	30	26G	26F	1719	91.58%	0.1405	0.1174	-5900.7	0.0000	0.0004	0.0000	0.0481	0.0370
97	33B	31	26A	26F	1720	91.64%	0.1409	0.1178	-5904.2	0.0000	0.0002	0.0002	0.0185	0.0141
98	33B	31	26B	26F	1721	91.69%	0.1540	0.1313	-5892.8	0.0000	0.0012	0.0004	0.0000	0.0040

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
99	33B	31	26C	26F	1721	91.69%	0.1498	0.1270	-5898.2	0.0000	0.0006	0.0012	0.0000	0.0112
100	33B	31	26D	26F	1720	91.64%	0.1548	0.1321	-5890.1	0.0000	0.0007	0.0002	0.0000	0.0317
101	33B	31	26E	26F	1716	91.42%	0.1486	0.1257	-5883.9	0.0000	0.0013	0.0003	0.0001	0.0304
102	33B	31	26G	26F	1720	91.64%	0.1405	0.1174	-5903.8	0.0000	0.0003	0.0001	0.0474	0.0368
103	33B	36	26A	26F	1699	90.52%	0.1342	0.1106	-5840.8	0.0000	0.0000	0.1050	0.0029	0.0052
104	33B	36	26B	26F	1700	90.57%	0.1476	0.1244	-5829.4	0.0000	0.0002	0.1842	0.0000	0.0009
105	33B	36	26C	26F	1700	90.57%	0.1446	0.1213	-5833.5	0.0000	0.0001	0.1507	0.0000	0.0033
106	33B	36	26D	26F	1699	90.52%	0.1488	0.1256	-5826.2	0.0000	0.0001	0.0987	0.0000	0.0111
107	33B	36	26E	26F	1696	90.36%	0.1425	0.1191	-5823.3	0.0000	0.0002	0.1200	0.0000	0.0100
108	33B	36	26G	26F	1700	90.57%	0.1326	0.1090	-5844.6	0.0000	0.0000	0.0856	0.0109	0.0138
109	34	30	26A	26F	1729	92.12%	0.1433	0.1204	-5934.4	0.0000	0.0004	0.0001	0.0143	0.0102
110	34	30	26B	26F	1730	92.17%	0.1548	0.1322	-5924.6	0.0000	0.0009	0.0014	0.0000	0.0027
111	34	30	26C	26F	1730	92.17%	0.1520	0.1294	-5928.5	0.0000	0.0000	0.0005	0.0000	0.0081
112	34	30	26D	26F	1729	92.12%	0.1540	0.1314	-5923.4	0.0000	0.0009	0.0009	0.0000	0.0184
113	34	30	26E	26F	1725	91.90%	0.1499	0.1271	-5915.2	0.0000	0.0009	0.0008	0.0002	0.0229
114	34	30	26G	26F	1729	92.12%	0.1402	0.1172	-5936.6	0.0000	0.0007	0.0001	0.2543	0.0142
115	34	31	26A	26F	1730	92.17%	0.1434	0.1205	-5937.3	0.0000	0.0000	0.0001	0.0499	0.0093
116	34	31	26B	26F	1731	92.22%	0.1566	0.1341	-5925.6	0.0000	0.0002	0.0004	0.0000	0.0031
117	34	31	26C	26F	1731	92.22%	0.1521	0.1295	-5931.4	0.0000	0.0001	0.0009	0.0001	0.0077
118	34	31	26D	26F	1730	92.17%	0.1564	0.1339	-5923.9	0.0000	0.0002	0.0002	0.0000	0.0221
119	34	31	26E	26F	1726	91.96%	0.1513	0.1286	-5916.8	0.0000	0.0001	0.0003	0.0003	0.0252
120	34	31	26G	26F	1730	92.17%	0.1421	0.1191	-5937.8	0.0000	0.0001	0.0000	0.4145	0.0142
121	34	36	26A	26F	1709	91.05%	0.1349	0.1115	-5875.7	0.0000	0.0000	0.1214	0.0103	0.0021
122	34	36	26B	26F	1710	91.10%	0.1489	0.1259	-5863.6	0.0000	0.0001	0.2100	0.0000	0.0004
123	34	36	26C	26F	1710	91.10%	0.1453	0.1222	-5868.4	0.0000	0.0001	0.1722	0.0000	0.0014
124	34	36	26D	26F	1709	91.05%	0.1489	0.1259	-5861.6	0.0000	0.0000	0.1135	0.0000	0.0050
125	34	36	26E	26F	1706	90.89%	0.1439	0.1207	-5857.5	0.0000	0.0001	0.1439	0.0000	0.0057
126	34	36	26G	26F	1710	91.10%	0.1323	0.1088	-5880.6	0.0000	0.0001	0.0957	0.2137	0.0032
127	35	30	26A	26F	1722	91.74%	0.1338	0.1106	-5915.1	0.0000	0.2299	0.0000	0.0063	0.0098
128	35	30	26B	26f	1723	91.80%	0.1455	0.1226	-5905.3	0.0000	0.3271	0.0004	0.0000	0.0022
129	35	30	26C	26F	1723	91.80%	0.1428	0.1198	-5909.2	0.0000	0.4000	0.0002	0.0000	0.0089
130	35	30	26D	26F	1722	91.74%	0.1449	0.1220	-5903.9	0.0000	0.3508	0.0003	0.0000	0.0193
131	35	30	26E	26F	1718	91.53%	0.1413	0.1181	-5895.3	0.0000	0.2992	0.0003	0.0000	0.0225
132	35	30	26G	26F	1722	91.74%	0.1312	0.1079	-5916.9	0.0000	0.3299	0.0000	0.0535	0.0198
133	35	31	26A	26F	1723	91.80%	0.1332	0.1099	-5918.8	0.0000	0.0662	0.0001	0.0211	0.0081
134	35	31	26B	26F	1724	91.85%	0.1471	0.1242	-5906.7	0.0000	0.1243	0.0002	0.0000	0.0023
135	35	31	26C	26F	1724	91.85%	0.1423	0.1193	-5912.7	0.0000	0.1702	0.0005	0.0000	0.0060
136	35	31	26D	26F	1723	91.80%	0.1468	0.1239	-5905.0	0.0000	0.1827	0.0001	0.0000	0.0216
137	35	31	26E	26F	1719	91.58%	0.1421	0.1190	-5897.4	0.0000	0.1143	0.0002	0.0000	0.0229
138	35	31	26G	26F	1723	91.80%	0.1322	0.1089	-5918.9	0.0000	0.1309	0.0000	0.0885	0.0192
139	35	36	26A	26F	1702	90.68%	0.1273	0.1036	-5854.4	0.0000	0.0159	0.0124	0.0041	0.0020
140	35	36	26B	26F	1703	90.73%	0.1415	0.1182	-5842.3	0.0000	0.0321	0.0249	0.0000	0.0003
141	35	36	26C	26F	1703	90.73%	0.1379	0.1145	-5847.0	0.0000	0.0530	0.0218	0.0000	0.0012
142	35	36	26D	26F	1702	90.68%	0.1415	0.1182	-5840.3	0.0000	0.0564	0.0135	0.0000	0.0053
143	35	36	26E	26F	1699	90.52%	0.1374	0.1139	-5835.2	0.0000	0.0265	0.0153	0.0000	0.0056
144	35	36	26G	26F	1703	90.73%	0.1258	0.1020	-5858.2	0.0000	0.0299	0.0075	0.0207	0.0051
145	37	30	26A	26F	1730	92.17%	0.1474	0.1246	-5933.2	0.0000	0.0000	0.0000	0.0079	0.0128
146	37	30	26B	26F	1731	92.22%	0.1595	0.1371	-5922.7	0.0000	0.0000	0.0005	0.0000	0.0029
147	37	30	26C	26F	1731	92.22%	0.1561	0.1335	-5927.4	0.0000	0.0000	0.0002	0.0000	0.0097

1996 (Total 1877)

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
148	37	30	26D	26F	1730	92.17%	0.1580	0.1355	-5922.4	0.0000	0.0001	0.0003	0.0000	0.0239
149	37	30	26E	26F	1726	91.96%	0.1530	0.1303	-5915.1	0.0000	0.0001	0.0002	0.0001	0.0255
150	37	30	26G	26F	1730	92.17%	0.1453	0.1224	-5934.5	0.0000	0.0000	0.0001	0.0489	0.0267
151	37	31	26A	26F	1731	92.22%	0.1462	0.1234	-5937.4	0.0000	0.0000	0.0001	0.0246	0.0106
152	37	31	26B	26F	1732	92.27%	0.1607	0.1383	-5924.5	0.0000	0.0000	0.0002	0.0000	0.0031
153	37	31	26C	26F	1732	92.27%	0.1551	0.1325	-5931.4	0.0000	0.0000	0.0006	0.0000	0.0084
154	37	31	26D	26F	1731	92.22%	0.1595	0.1370	-5923.8	0.0000	0.0000	0.0001	0.0000	0.0275
155	37	31	26E	26F	1727	92.01%	0.1532	0.1305	-5917.9	0.0000	0.0000	0.0001	0.0001	0.0261
156	37	31	26G	26F	1731	92.22%	0.1461	0.1233	-5936.7	0.0000	0.0000	0.0000	0.0582	0.0277
157	37	36	26A	26F	1710	91.10%	0.1368	0.1135	-5876.8	0.0000	0.0000	0.1491	0.0035	0.0025
158	37	36	26B	26F	1711	91.16%	0.1521	0.1292	-5863.4	0.0000	0.0000	0.2531	0.0000	0.0004
159	37	36	26C	26F	1711	91.16%	0.1475	0.1244	-5869.2	0.0000	0.0000	0.2067	0.0000	0.0016
160	37	36	26D	26F	1710	91.10%	0.1511	0.1282	-5862.4	0.0000	0.0000	0.1336	0.0000	0.0066
161	37	36	26E	26F	1707	90.94%	0.1450	0.1218	-5859.4	0.0000	0.0000	0.1752	0.0000	0.0061
162	37	36	26G	26F	1711	91.16%	0.1360	0.1126	-5880.0	0.0000	0.0000	0.1252	0.0127	0.0074
MAX					1732	92.27%	0.1442	0.1665	-5823.3	0.0000	0.5885	0.2947	0.4145	0.0755
MIN					1696	90.36%	0.0974	0.1212	-5951.8	0.0000	0.0000	0.0000	0.0000	0.0003

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Appendix B.

Combinations of Avoidance, Modification, Substitution, and Replacement

Dependent Variable: Percentage of Calories from Saturated Fat

Dependent Variable: Percent of Calories from Saturated Fat, 1994.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1994														
TABLE 6. COMBINATIONS OF AVOIDANCE,MODIFICATION, SUBSTITUTION, AND REPLACEMENT														
DEPENDENT VARIABLE: PERCENTAGE OF CALORIES FROM SATURATED FAT														
1836 TOTAL OBSERVATIONS														
COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1	27	30	26A	26F	1663	90.58%	0.1646	0.1414	-4305.95	0.0000	0.0000	0.0010	0.0391	0.0448
2	27	30	26B	26F	1666	90.74%	0.1704	0.1474	-4308.29	0.0000	0.0000	0.0000	0.0004	0.0257
3	27	30	26C	26F	1664	90.63%	0.1715	0.1485	-4302.51	0.0000	0.0001	0.0040	0.0001	0.0883
4	27	30	26D	26F	1666	90.74%	0.1667	0.1435	-4312.02	0.0000	0.0001	0.0014	0.0144	0.1179
5	27	30	26E	26F	1666	90.74%	0.1654	0.1422	-4313.34	0.0000	0.0000	0.0019	0.0378	0.0492
6	27	30	26G	26F	1664	90.63%	0.1690	0.1459	-4249.93	0.0000	0.0000	0.0032	0.0002	0.1474
7	27	31	26A	26F	1663	90.58%	0.1586	0.1352	-4312.69	0.0000	0.0000	0.1297	0.0294	0.0251
8	27	31	26B	26F	1666	90.74%	0.1657	0.1426	-4313.75	0.0000	0.0000	0.1428	0.0001	0.0149
9	27	31	26C	26F	1664	90.63%	0.1665	0.1433	-4234.86	0.0000	0.0000	0.2581	0.0001	0.0589
10	27	31	26D	26F	1666	90.74%	0.1611	0.1378	-4318.34	0.0000	0.0000	0.1514	0.0108	0.0799
11	27	31	26E	26F	1666	90.74%	0.1593	0.1360	-4320.15	0.0000	0.0000	0.2205	0.0397	0.0291
12	27	31	26G	26F	1664	90.63%	0.1646	0.1414	-4308.58	0.0000	0.0000	0.1111	0.0000	0.1007
13	27	36	26A	26F	1659	90.36%	0.1621	0.1388	-4300.67	0.0000	0.0000	0.0111	0.0229	0.0312
14	27	36	26B	26F	1662	90.52%	0.1698	0.1466	-4301.21	0.0000	0.0000	0.0078	0.0001	0.0194
15	27	36	26C	26F	1660	90.41%	0.1710	0.1479	-4295.28	0.0000	0.0000	0.0092	0.0000	0.0803
16	27	36	26D	26F	1662	90.52%	0.1650	0.1417	-4306.01	0.0000	0.0000	0.0094	0.0084	0.1041
17	27	36	26E	26F	1662	90.52%	0.1629	0.1396	-4308.03	0.0000	0.0000	0.0149	0.0363	0.0388
18	27	36	26G	26F	1660	90.41%	0.1694	0.1463	-4295.26	0.0000	0.0000	0.0028	0.0000	0.1303
19	28	30	26A	26F	1669	90.90%	0.1629	0.1396	-4321.79	0.0000	0.0000	0.0001	0.0192	0.0328
20	28	30	26B	26F	1672	91.07%	0.1675	0.1445	-4325.26	0.0000	0.0001	0.0007	0.0004	0.0189
21	28	30	26C	26F	1670	90.96%	0.1690	0.1460	-4319.10	0.0000	0.0002	0.0008	0.0001	0.0735
22	28	30	26D	26F	1672	91.07%	0.1650	0.1419	-4327.77	0.0000	0.0001	0.0003	0.0052	0.1099
23	28	30	26E	26F	1672	91.07%	0.1619	0.1387	-4330.89	0.0000	0.0001	0.0002	0.0579	0.0346
24	28	30	26G	26F	1670	90.96%	0.1679	0.1449	-4318.59	0.0000	0.0000	0.0008	0.0000	0.1281
25	28	31	26A	26F	1669	90.90%	0.1550	0.1316	-4330.40	0.0000	0.0000	0.1330	0.0128	0.0142
26	28	31	26B	26F	1672	91.07%	0.1610	0.1378	-4332.56	0.0000	0.0000	0.1580	0.0001	0.0086
27	28	31	26C	26F	1670	90.96%	0.1624	0.1392	-4326.53	0.0000	0.0001	0.2894	0.0000	0.0403
28	28	31	26D	26F	1672	91.07%	0.1578	0.1345	-4335.78	0.0000	0.0001	0.1764	0.0034	0.0636
29	28	31	26E	26F	1672	91.07%	0.1539	0.1305	-4339.62	0.0000	0.0001	0.2146	0.0630	0.0152
30	28	31	26G	26F	1670	90.96%	0.1619	0.1387	-4325.37	0.0000	0.0000	0.1474	0.0000	0.0743
31	28	36	26A	26F	1665	90.69%	0.1575	0.1341	-4319.36	0.0000	0.0000	0.0263	0.0088	0.0153
32	28	36	26B	26F	1668	90.85%	0.1640	0.1409	-4321.01	0.0000	0.0000	0.0204	0.0001	0.0096
33	28	36	26C	26F	1666	90.74%	0.1660	0.1428	-4314.40	0.0000	0.0001	0.0214	0.0000	0.0495
34	28	36	26D	26F	1668	90.85%	0.1608	0.1375	-4324.28	0.0000	0.0001	0.0230	0.0022	0.0762
35	28	36	26E	26F	1668	90.85%	0.1566	0.1332	-4328.41	0.0000	0.0001	0.0304	0.0503	0.0180
36	28	36	26G	26F	1666	90.74%	0.1659	0.1428	-4312.83	0.0000	0.0000	0.0088	0.0000	0.0878
37	29	30	26A	26F	1668	90.85%	0.1546	0.1311	-4327.43	0.0000	0.0328	0.0002	0.0192	0.0128
38	29	30	26B	26F	1671	91.01%	0.1596	0.1363	-4330.58	0.0000	0.0421	0.0010	0.0004	0.0059
39	29	30	26C	26F	1669	90.90%	0.1633	0.1401	-4322.24	0.0000	0.0156	0.0015	0.0000	0.0343
40	29	30	26D	26F	1671	91.01%	0.1583	0.1350	-4331.81	0.0000	0.0419	0.0004	0.0020	0.0690
41	29	30	26E	26F	1671	91.01%	0.1556	0.1322	-4334.51	0.0000	0.0222	0.0006	0.0136	0.0155
42	29	30	26G	26F	1669	90.90%	0.1589	0.1356	-4324.95	0.0000	0.0557	0.0007	0.0001	0.0665

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
43	29	31	26A	26F	1668	90.85%	0.1475	0.1238	-4334.40	0.0000	0.0108	0.0725	0.0161	0.0013
44	29	31	26B	26F	1671	91.01%	0.1541	0.1306	-4336.06	0.0000	0.0167	0.0926	0.0001	0.0033
45	29	31	26C	26F	1669	90.90%	0.1574	0.1341	-4328.04	0.0000	0.0055	0.2092	0.0000	0.0228
46	29	31	26D	26F	1671	91.01%	0.1519	0.1284	-4271.91	0.0000	0.0148	0.1133	0.0016	0.0408
47	29	31	26E	26F	1671	91.01%	0.1489	0.1253	-4341.15	0.0000	0.0065	0.1614	0.0126	0.0092
48	29	31	26G	26F	1669	90.90%	0.1534	0.1300	-4330.37	0.0000	0.0262	0.0743	0.0000	0.0443
49	29	36	26A	26F	1663	90.58%	0.1491	0.1254	-4322.05	0.0000	0.0154	0.0349	0.0099	0.0066
50	29	36	26B	26F	1666	90.74%	0.1563	0.1329	-4323.08	0.0000	0.0224	0.0266	0.0000	0.0035
51	29	36	26C	26F	1664	90.63%	0.1603	0.1370	-4314.42	0.0000	0.0074	0.0309	0.0000	0.0276
52	29	36	26D	26F	1666	90.74%	0.1541	0.1306	-4325.24	0.0000	0.0200	0.0317	0.0008	0.0464
53	29	36	26E	26F	1666	90.74%	0.1508	0.1272	-4328.52	0.0000	0.0089	0.0493	0.0076	0.0108
54	29	36	26G	26F	1664	90.63%	0.1565	0.1330	-4316.62	0.0000	0.0387	0.0103	0.0000	0.0519
55	32	30	26A	26F	1670	90.96%	0.1554	0.1320	-4329.50	0.0000	0.0128	0.0007	0.0332	0.0363
56	32	30	26B	26F	1672	91.07%	0.1609	0.1377	-4329.64	0.0000	0.0144	0.0031	0.0004	0.0201
57	32	30	26C	26F	1670	90.96%	0.1626	0.1394	-4323.49	0.0000	0.0297	0.0029	0.0001	0.0683
58	32	30	26D	26F	1672	91.07%	0.1586	0.1353	-4332.15	0.0000	0.0258	0.0011	0.0046	0.1138
59	32	30	26E	26F	1672	91.07%	0.1558	0.1324	-4334.94	0.0000	0.0127	0.0013	0.0358	0.0352
60	32	30	26G	26F	1671	91.01%	0.1586	0.1353	-4328.18	0.0000	0.0326	0.0020	0.0004	0.1247
61	32	31	26A	26F	1669	90.90%	0.1487	0.1251	-4334.58	0.0000	0.0029	0.1599	0.0271	0.0188
62	32	31	26B	26F	1672	91.07%	0.1557	0.1324	-4335.75	0.0000	0.0043	0.1727	0.0001	0.0109
63	32	31	26C	26F	1670	90.96%	0.1571	0.1337	-4329.76	0.0000	0.0093	0.3016	0.0000	0.0422
64	32	31	26D	26F	1672	91.07%	0.1525	0.1291	-4338.91	0.0000	0.0070	0.1951	0.0033	0.0737
65	32	31	26E	26F	1672	91.07%	0.1491	0.1255	-4342.33	0.0000	0.0030	0.2630	0.0408	0.0190
66	32	31	26G	26F	1670	90.96%	0.1534	0.1299	-4331.80	0.0000	0.0120	0.1310	0.0001	0.0763
67	32	36	26A	26F	1666	90.74%	0.1515	0.1279	-4325.62	0.0000	0.0016	0.0272	0.0207	0.0231
68	32	36	26B	26F	1668	90.85%	0.1590	0.1357	-4323.99	0.0000	0.0024	0.0186	0.0001	0.0133
69	32	36	26C	26F	1666	90.74%	0.1609	0.1376	-4317.41	0.0000	0.0064	0.0182	0.0000	0.0545
70	32	36	26D	26F	1668	90.85%	0.1557	0.1323	-4327.27	0.0000	0.0044	0.0211	0.0024	0.0923
71	32	36	26E	26F	1668	90.85%	0.1520	0.1285	-4330.88	0.0000	0.0017	0.0300	0.0326	0.0241
72	32	36	26G	26F	1667	90.80%	0.1574	0.1340	-4321.62	0.0000	0.0081	0.0078	0.0000	0.0983
73	33A	30	26A	26F	1672	91.07%	0.1528	0.1294	-4338.74	0.0000	0.2146	0.0002	0.0284	0.0343
74	33A	30	26B	26F	1674	91.18%	0.1583	0.1351	-4339.10	0.0000	0.2020	0.0010	0.0003	0.0182
75	33A	30	26C	26F	1672	91.07%	0.1607	0.1375	-4332.08	0.0000	0.2470	0.0010	0.0000	0.0695
76	33A	30	26D	26F	1674	91.18%	0.1564	0.1331	-4330.97	0.0000	0.2567	0.0003	0.0027	0.1148
77	33A	30	26E	26F	1674	91.18%	0.1532	0.1298	-4344.22	0.0000	0.2541	0.0003	0.0286	0.0363
78	33A	30	26G	26F	1673	91.12%	0.1576	0.1343	-4335.89	0.0000	0.2116	0.0009	0.0001	0.1383
79	33A	31	26A	26F	1671	91.01%	0.1450	0.1213	-4344.86	0.0000	0.0803	0.1007	0.0240	0.1779
80	33A	31	26B	26F	1674	91.18%	0.1520	0.1286	-4346.13	0.0000	0.0926	0.1272	0.0001	0.0107
81	33A	31	26C	26F	1672	91.07%	0.1541	0.1307	-4339.41	0.0000	0.1178	0.2542	0.0000	0.0458
82	33A	31	26D	26F	1674	91.18%	0.1493	0.1258	-4348.80	0.0000	0.1106	0.1483	0.0019	0.0804
83	33A	31	26E	26F	1674	91.18%	0.1453	0.1217	-4352.71	0.0000	0.0997	0.1782	0.0331	0.2104
84	33A	31	26G	26F	1672	91.07%	0.1519	0.1284	-4334.95	0.0000	0.0810	0.0945	0.0000	0.0930
85	33A	36	26A	26F	1668	90.85%	0.1474	0.1238	-4336.27	0.0000	0.0638	0.0252	0.0161	0.0211
86	33A	36	26B	26F	1670	90.96%	0.1550	0.1316	-4334.61	0.0000	0.0678	0.0187	0.0000	0.0125
87	33A	36	26C	26F	1668	90.85%	0.1577	0.1343	-4327.30	0.0000	0.0993	0.0211	0.0000	0.0577
88	33A	36	26D	26F	1670	90.96%	0.1522	0.1288	-4337.38	0.0000	0.0876	0.0219	0.0012	0.0987
89	33A	36	26E	26F	1670	90.96%	0.1479	0.1243	-4341.60	0.0000	0.0813	0.0293	0.0247	0.0257
90	33A	36	26G	26F	1669	90.90%	0.1558	0.1324	-4329.95	0.0000	0.0656	0.0067	0.0000	0.1165
91	33B	30	26A	26F	1653	90.03%	0.1536	0.1299	-4290.11	0.0000	0.3819	0.0001	0.0160	0.0215

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COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
92	33B	30	26B	26F	1655	90.14%	0.1582	0.1347	-4291.42	0.0000	0.5493	0.0006	0.0004	0.0091
93	33B	30	26C	26F	1653	90.03%	0.1619	0.1385	-4283.12	0.0000	0.4755	0.0007	0.0000	0.0435
94	33B	30	26D	26F	1655	90.14%	0.1568	0.1332	-4292.87	0.0000	0.5353	0.0002	0.0024	0.0810
95	33B	30	26E	26F	1655	90.14%	0.1542	0.1306	-4295.36	0.0000	0.3084	0.0003	0.0120	0.0241
96	33B	30	26G	26F	1654	90.09%	0.1584	0.1348	-4287.32	0.0000	0.4330	0.0008	0.0001	0.0975
97	33B	31	26A	26F	1652	89.98%	0.1455	0.1215	-4296.52	0.0000	0.2203	0.0752	0.0155	0.0091
98	33B	31	26B	26F	1655	90.14%	0.1519	0.1282	-4298.39	0.0000	0.3466	0.0763	0.0000	0.0043
99	33B	31	26C	26F	1653	90.03%	0.1554	0.1317	-4290.36	0.0000	0.3330	0.1820	0.0000	0.0247
100	33B	31	26D	26F	1655	90.14%	0.1496	0.1258	-4300.67	0.0000	0.3329	0.0983	0.0016	0.0494
101	33B	31	26E	26F	1655	90.14%	0.1464	0.1225	-4303.77	0.0000	0.1642	0.1423	0.0138	0.0117
102	33B	31	26G	26F	1653	90.03%	0.1525	0.1288	-4291.54	0.0000	0.2713	0.0643	0.0000	0.0581
103	33B	36	26A	26F	1649	89.81%	0.1475	0.1236	-4288.32	0.0000	0.2468	0.0256	0.0096	0.0111
104	33B	36	26B	26F	1651	89.92%	0.1544	0.1307	-4287.39	0.0000	0.3926	0.0159	0.0000	0.0051
105	33B	36	26C	26F	1649	89.81%	0.1586	0.1350	-4278.62	0.0000	0.3765	0.0182	0.0000	0.0322
106	33B	36	26D	26F	1651	89.92%	0.1521	0.1283	-4289.71	0.0000	0.3854	0.0193	0.0009	0.0624
107	33B	36	26E	26F	1651	89.92%	0.1485	0.1247	-4293.13	0.0000	0.1889	0.0304	0.0092	0.0148
108	33B	36	26G	26F	1650	89.87%	0.1560	0.1323	-4281.91	0.0000	0.2967	0.0066	0.0000	0.0753
109	34	30	26A	26F	1669	90.90%	0.1613	0.1380	-4271.18	0.0000	0.0001	0.0018	0.0503	0.0336
110	34	30	26B	26F	1672	91.07%	0.1666	0.1435	-4325.77	0.0000	0.0001	0.0061	0.0008	0.0185
111	34	30	26C	26F	1670	90.96%	0.1697	0.1466	-4318.04	0.0000	0.0000	0.0062	0.0001	0.0733
112	34	30	26D	26F	1672	91.07%	0.1649	0.1418	-4327.45	0.0000	0.0001	0.0032	0.0052	0.1100
113	34	30	26E	26F	1672	91.07%	0.1624	0.1392	-4329.98	0.0000	0.0000	0.0037	0.0355	0.0388
114	34	30	26G	26F	1670	90.96%	0.1623	0.1391	-4323.81	0.0000	0.0018	0.0025	0.0061	0.0837
115	34	31	26A	26F	1669	90.90%	0.1565	0.1332	-4328.43	0.0000	0.0000	0.0939	0.0517	0.0207
116	34	31	26B	26F	1672	91.07%	0.1630	0.1399	-4330.13	0.0000	0.0000	0.0973	0.0003	0.0118
117	34	31	26C	26F	1670	90.96%	0.1658	0.1427	-4322.64	0.0000	0.0000	0.2129	0.0000	0.0532
118	34	31	26D	26F	1672	91.07%	0.1607	0.1375	-4332.41	0.0000	0.0000	0.1271	0.0045	0.0808
119	34	31	26E	26F	1672	91.07%	0.1577	0.1343	-4335.47	0.0000	0.0000	0.1656	0.0464	0.0248
120	34	31	26G	26F	1670	90.96%	0.1583	0.1350	-4328.56	0.0000	0.0002	0.0702	0.0042	0.0568
121	34	36	26A	26F	1666	90.74%	0.1618	0.1385	-4316.83	0.0000	0.0000	0.0018	0.0448	0.0258
122	34	36	26B	26F	1669	90.90%	0.1688	0.1457	-4317.97	0.0000	0.0000	0.0012	0.0002	0.0150
123	34	36	26C	26F	1667	90.80%	0.1721	0.1491	-4309.96	0.0000	0.0000	0.0018	0.0000	0.0691
124	34	36	26D	26F	1669	90.90%	0.1664	0.1432	-4320.38	0.0000	0.0000	0.0018	0.0034	0.1010
125	34	36	26E	26F	1669	90.90%	0.1630	0.1398	-4323.75	0.0000	0.0000	0.0024	0.0434	0.0321
126	34	36	26G	26F	1667	90.80%	0.1643	0.1411	-4316.12	0.0000	0.0000	0.0008	0.0023	0.0737
127	35	30	26A	26F	1657	90.25%	0.1537	0.1300	-4291.42	0.0000	0.0591	0.0008	0.0167	0.0310
128	35	30	26B	26F	1660	90.41%	0.1599	0.1364	-4293.48	0.0000	0.0428	0.0034	0.0001	0.0193
129	35	30	26C	26F	1658	90.31%	0.1632	0.1399	-4285.49	0.0000	0.0366	0.0042	0.0000	0.0781
130	35	30	26D	26F	1660	90.41%	0.1569	0.1334	-4296.44	0.0000	0.0896	0.0012	0.0033	0.1107
131	35	30	26E	26F	1660	90.41%	0.1543	0.1307	-4299.01	0.0000	0.0545	0.0014	0.0207	0.0339
132	35	30	26G	26F	1658	90.31%	0.1585	0.1350	-4288.52	0.0000	0.0992	0.0014	0.0001	0.1206
133	35	31	26A	26F	1657	90.25%	0.1470	0.1232	-4298.69	0.0000	0.0093	0.0958	0.0123	0.0174
134	35	31	26B	26F	1660	90.41%	0.1548	0.1312	-4299.30	0.0000	0.0082	0.1286	0.0000	0.0114
135	35	31	26C	26F	1658	90.31%	0.1580	0.1345	-4291.45	0.0000	0.0069	0.2626	0.0000	0.0523
136	35	31	26D	26F	1660	90.41%	0.1510	0.1273	-4303.01	0.0000	0.0152	0.1263	0.0020	0.0766
137	35	31	26E	26F	1660	90.41%	0.1476	0.1238	-4306.33	0.0000	0.0083	0.1956	0.0221	0.0191
138	35	31	26G	26F	1658	90.31%	0.1530	0.1293	-4294.77	0.0000	0.0329	0.1011	0.0000	0.0780
139	35	36	26A	26F	1653	90.03%	0.1545	0.1308	-4282.94	0.0000	0.0004	0.0001	0.0113	0.0218
140	35	36	26B	26F	1656	90.20%	0.1626	0.1392	-4283.11	0.0000	0.0004	0.0001	0.0000	0.0146

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
141	35	36	26C	26F	1654	90.09%	0.1666	0.1433	-4274.46	0.0000	0.0004	0.0001	0.0000	0.0692
142	35	36	26D	26F	1656	90.20%	0.1592	0.1367	-4286.41	0.0000	0.0005	0.0000	0.0011	0.1007
143	35	36	26E	26F	1656	90.20%	0.1551	0.1315	-4290.43	0.0000	0.0004	0.0001	0.0210	0.0247
144	35	36	26G	26F	1654	90.09%	0.1605	0.1371	-4278.81	0.0000	0.0040	0.0001	0.0000	0.0940
145	37	30	26A	26F	1670	90.96%	0.1720	0.1491	-4314.72	0.0000	0.0000	0.0014	0.0339	0.0100
146	37	30	26B	26F	1673	91.12%	0.1757	0.1529	-4319.10	0.0000	0.0000	0.0052	0.0017	0.0050
147	37	30	26C	26F	1671	91.01%	0.1780	0.1553	-4312.08	0.0000	0.0000	0.0084	0.0002	0.0244
148	37	30	26D	26F	1673	91.12%	0.1751	0.1523	-4319.70	0.0000	0.0000	0.0028	0.0049	0.0472
149	37	30	26E	26F	1673	91.12%	0.1716	0.1487	-4323.24	0.0000	0.0000	0.0024	0.0622	0.0117
150	37	30	26G	26F	1671	91.01%	0.1763	0.1534	-4312.27	0.0000	0.0000	0.0055	0.0001	0.0457
151	37	31	26A	26F	1670	90.96%	0.1659	0.1427	-4321.69	0.0000	0.0000	0.1953	0.0252	0.0041
152	37	31	26B	26F	1673	91.12%	0.1708	0.1478	-4324.86	0.0000	0.0000	0.2045	0.0005	0.0021
153	37	31	26C	26F	1671	91.01%	0.1730	0.1501	-4317.97	0.0000	0.0000	0.3620	0.0001	0.0125
154	37	31	26D	26F	1673	91.12%	0.1697	0.1468	-4325.91	0.0000	0.0000	0.2355	0.0031	0.0282
155	37	31	26E	26F	1673	91.12%	0.1654	0.1423	-4330.26	0.0000	0.0000	0.2916	0.0669	0.0050
156	37	31	26G	26F	1671	91.01%	0.1720	0.1490	-4317.39	0.0000	0.0000	0.1672	0.0000	0.0250
157	37	36	26A	26F	1666	90.74%	0.1678	0.1447	-4311.21	0.0000	0.0000	0.0872	0.0177	0.0044
158	37	36	26B	26F	1669	90.90%	0.1732	0.1503	-4313.94	0.0000	0.0000	0.0610	0.0003	0.0023
159	37	36	26C	26F	1667	90.80%	0.1759	0.1530	-4306.54	0.0000	0.0000	0.0694	0.0000	0.0158
160	37	36	26D	26F	1669	90.90%	0.1721	0.1492	-4315.00	0.0000	0.0000	0.0739	0.0019	0.0325
161	37	36	26E	26F	1669	90.90%	0.1675	0.1444	-4319.62	0.0000	0.0000	0.0963	0.0506	0.0060
162	37	36	26G	26F	1667	90.80%	0.1752	0.1523	-4305.68	0.0000	0.0000	0.0271	0.0000	0.0300
MAX					1674	91.18%	0.1780	0.1553	-4234.86	0.0000	0.5493	0.3620	0.0669	0.2104
MIN					1649	89.81%	0.1450	0.1213	-4352.71	0.0000	0.0000	0.0000	0.0000	0.0013

PCTSFAT

Dependent Variable: Percent of Calories from Saturated Fat, 1995.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1	27	30	26A	26F	1800	92.98%	0.1845	0.1635	-4614.69	0.0000	0.0000	0.0000	0.0090	0.0086
2	27	30	26B	26F	1797	92.82%	0.1949	0.1742	-4596.67	0.0000	0.0000	0.0000	0.0000	0.0077
3	27	30	26C	26F	1796	92.77%	0.1878	0.1669	-4602.32	0.0000	0.0000	0.0000	0.0005	0.0169
4	27	30	26D	26F	1798	92.87%	0.1824	0.1614	-4610.63	0.0000	0.0000	0.0000	0.0616	0.0079
5	27	30	26E	26F	1800	92.98%	0.1827	0.1617	-4615.75	0.0000	0.0000	0.0000	0.0739	0.0069
6	27	30	26G	26F	1799	92.92%	0.1848	0.1639	-4610.42	0.0000	0.0000	0.0000	0.0143	0.0445
7	27	31	26A	26F	1800	92.98%	0.1699	0.1486	-4629.98	0.0000	0.0000	0.0246	0.0063	0.0048
8	27	31	26B	26F	1797	92.82%	0.1821	0.1611	-4610.12	0.0000	0.0000	0.0495	0.0000	0.0038
9	27	31	26C	26F	1796	92.77%	0.1752	0.1540	-4615.48	0.0000	0.0000	0.0255	0.0001	0.0110
10	27	31	26D	26F	1798	92.87%	0.1688	0.1475	-4624.70	0.0000	0.0000	0.0127	0.0127	0.0047
11	27	31	26E	26F	1800	92.98%	0.1693	0.1480	-4629.70	0.0000	0.0000	0.0156	0.0127	0.0043
12	27	31	26G	26F	1799	92.92%	0.1706	0.1493	-4625.28	0.0000	0.0000	0.0159	0.0073	0.0334
13	27	36	26A	26F	1789	92.41%	0.1692	0.1477	-4596.91	0.0000	0.0000	0.0293	0.0031	0.0025
14	27	36	26B	26F	1786	92.25%	0.1819	0.1608	-4576.58	0.0000	0.0000	0.0124	0.0000	0.0031
15	27	36	26C	26F	1785	92.20%	0.1743	0.1529	-4582.65	0.0000	0.0000	0.0199	0.0000	0.0065
16	27	36	26D	26F	1787	92.30%	0.1671	0.1455	-4592.77	0.0000	0.0000	0.0203	0.0245	0.0030
17	27	36	26E	26F	1789	92.41%	0.1683	0.1468	-4598.95	0.0000	0.0000	0.0195	0.0111	0.0024
18	27	36	26G	26F	1788	92.36%	0.1694	0.1480	-4592.77	0.0000	0.0000	0.0191	0.0086	0.0219
19	28	30	26A	26F	1798	92.87%	0.1758	0.1546	-4619.79	0.0000	0.0014	0.0000	0.0078	0.0065
20	28	30	26B	26F	1795	92.72%	0.1873	0.1664	-4600.63	0.0000	0.0021	0.0000	0.0000	0.0061
21	28	30	26C	26F	1795	92.72%	0.1796	0.1585	-4608.95	0.0000	0.0028	0.0000	0.0002	0.0134
22	28	30	26D	26F	1796	92.77%	0.1737	0.1525	-4615.63	0.0000	0.0027	0.0000	0.0542	0.0059
23	28	30	26E	26F	1798	92.87%	0.1734	0.1522	-4621.44	0.0000	0.0021	0.0000	0.1075	0.0045
24	28	30	26G	26F	1797	92.82%	0.1753	0.1541	-4818.48	0.0000	0.0031	0.0000	0.0197	0.0293
25	28	31	26A	26F	1798	92.87%	0.1585	0.1368	-4637.80	0.0000	0.0001	0.0087	0.0048	0.0031
26	28	31	26B	26F	1795	92.72%	0.1720	0.1507	-4616.87	0.0000	0.0003	0.0262	0.0000	0.0024
27	28	31	26C	26F	1795	92.72%	0.1643	0.1428	-4624.88	0.0000	0.0004	0.0119	0.0000	0.0073
28	28	31	26D	26F	1796	92.77%	0.1578	0.1361	-4632.12	0.0000	0.0003	0.0044	0.0068	0.0032
29	28	31	26E	26F	1798	92.87%	0.1571	0.1341	-4638.37	0.0000	0.0003	0.0061	0.0202	0.0023
30	28	31	26G	26F	1797	92.82%	0.1581	0.1364	-4634.35	0.0000	0.0004	0.0052	0.0104	0.0182
31	28	36	26A	26F	1787	92.30%	0.1571	0.1353	-4605.35	0.0000	0.0003	0.0374	0.0022	0.0016
32	28	36	26B	26F	1784	92.15%	0.1715	0.1500	-4583.50	0.0000	0.0009	0.0157	0.0000	0.0019
33	28	36	26C	26F	1784	92.15%	0.1633	0.1416	-4592.14	0.0000	0.0011	0.0230	0.0000	0.0045
34	28	36	26D	26F	1785	92.20%	0.1554	0.1335	-4600.78	0.0000	0.0009	0.0256	0.0138	0.0020
35	28	36	26E	26F	1787	92.30%	0.1557	0.1338	-4605.95	0.0000	0.0007	0.0222	0.0134	0.0013
36	28	36	26G	26F	1786	92.25%	0.1563	0.1345	-4602.31	0.0000	0.0011	0.0242	0.0113	0.0117
37	29	30	26A	26F	1799	92.92%	0.1813	0.1603	-4615.78	0.0000	0.0000	0.0000	0.0150	0.0035
38	29	30	26B	26F	1796	92.77%	0.1945	0.1738	-4594.70	0.0000	0.0000	0.0000	0.0000	0.0040
39	29	30	26C	26F	1795	92.72%	0.1873	0.1664	-4600.42	0.0000	0.0000	0.0000	0.0001	0.0094
40	29	30	26D	26F	1797	92.82%	0.1795	0.1585	-4611.32	0.0000	0.0000	0.0000	0.0764	0.0035
41	29	30	26E	26F	1799	92.92%	0.1794	0.1583	-4617.00	0.0000	0.0000	0.0000	0.1094	0.0027
42	29	30	26G	26F	1798	92.87%	0.1815	0.1604	-4811.73	0.0000	0.0000	0.0000	0.0169	0.0188
43	29	31	26A	26F	1799	92.92%	0.1639	0.1424	-4634.01	0.0000	0.0000	0.0058	0.0090	0.0013
44	29	31	26B	26F	1796	92.77%	0.1794	0.1583	-4610.74	0.0000	0.0000	0.0242	0.0000	0.0013
45	29	31	26C	26F	1795	92.72%	0.1725	0.1511	-4616.05	0.0000	0.0000	0.0106	0.0000	0.0044
46	29	31	26D	26F	1797	92.82%	0.1636	0.1421	-4627.93	0.0000	0.0000	0.0036	0.0097	0.0016
47	29	31	26E	26F	1799	92.92%	0.1630	0.1416	-4634.03	0.0000	0.0000	0.0048	0.0188	0.0012
48	29	31	26G	26F	1798	92.87%	0.1643	0.1428	-4629.72	0.0000	0.0000	0.0042	0.0072	0.0099
49	29	36	26A	26F	1788	92.36%	0.1631	0.1415	-4601.01	0.0000	0.0000	0.0425	0.0050	0.0008
50	29	36	26B	26F	1785	92.20%	0.1794	0.1582	-4576.89	0.0000	0.0000	0.0209	0.0000	0.0012

PCTSFAT

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
51	29	36	26C	26F	1784	92.15%	0.1719	0.1504	-4582.87	0.0000	0.0000	0.0328	0.0000	0.0030
52	29	36	26D	26F	1786	92.25%	0.1620	0.1404	-4595.74	0.0000	0.0000	0.0309	0.0163	0.0011
53	29	36	26E	26F	1788	92.36%	0.1624	0.1408	-4600.85	0.0000	0.0000	0.0258	0.0112	0.0008
54	29	36	26G	26F	1787	92.30%	0.1632	0.1415	-4597.06	0.0000	0.0000	0.0308	0.0089	0.0068
55	32	30	26A	26F	1799	92.92%	0.1830	0.1621	-4614.20	0.0000	0.0000	0.0000	0.0199	0.0099
56	32	30	26B	26F	1796	92.77%	0.1938	0.1731	-4595.77	0.0000	0.0000	0.0000	0.0000	0.0088
57	32	30	26C	26F	1795	92.72%	0.1869	0.1660	-4601.24	0.0000	0.0000	0.0000	0.0005	0.0184
58	32	30	26D	26F	1797	92.82%	0.1813	0.1603	-4609.69	0.0000	0.0000	0.0000	0.0771	0.0097
59	32	30	26E	26F	1799	92.92%	0.1809	0.1599	-4615.57	0.0000	0.0000	0.0000	0.2050	0.0072
60	32	30	26G	26F	1798	92.87%	0.1835	0.1625	-4609.80	0.0000	0.0000	0.0000	0.0168	0.0459
61	32	31	26A	26F	1799	92.92%	0.1680	0.1466	-4629.95	0.0000	0.0000	0.0190	0.0110	0.0047
62	32	31	26B	26F	1796	92.77%	0.1802	0.1591	-4610.15	0.0000	0.0000	0.0713	0.0000	0.0034
63	32	31	26C	26F	1795	92.72%	0.1736	0.1524	-4615.08	0.0000	0.0000	0.0296	0.0001	0.0099
64	32	31	26D	26F	1797	92.82%	0.1675	0.1461	-4624.08	0.0000	0.0000	0.0123	0.0111	0.0052
65	32	31	26E	26F	1799	92.92%	0.1666	0.1452	-4630.55	0.0000	0.0000	0.0156	0.0541	0.0037
66	32	31	26G	26F	1798	92.87%	0.1686	0.1472	-4625.45	0.0000	0.0000	0.0179	0.0083	0.0295
67	32	36	26A	26F	1788	92.36%	0.1652	0.1436	-4599.13	0.0000	0.0000	0.0995	0.0070	0.0030
68	32	36	26B	26F	1785	92.20%	0.1785	0.1573	-4578.22	0.0000	0.0000	0.0451	0.0000	0.0034
69	32	36	26C	26F	1784	92.15%	0.1712	0.1498	-4583.88	0.0000	0.0000	0.0642	0.0000	0.0075
70	32	36	26D	26F	1786	92.25%	0.1638	0.1422	-4594.21	0.0000	0.0000	0.0810	0.0241	0.0039
71	32	36	26E	26F	1788	92.36%	0.1639	0.1423	-4599.60	0.0000	0.0000	0.0624	0.0377	0.0025
72	32	36	26G	26F	1787	92.30%	0.1656	0.1440	-4594.81	0.0000	0.0000	0.0795	0.0097	0.0233
73	33A	30	26A	26F	1799	92.92%	0.1754	0.1542	-4622.58	0.0000	0.0020	0.0000	0.0101	0.0221
74	33A	30	26B	26F	1796	92.77%	0.1866	0.1657	-4603.74	0.0000	0.0043	0.0000	0.0000	0.0208
75	33A	30	26C	26F	1795	92.72%	0.1804	0.1593	-4608.40	0.0000	0.0017	0.0000	0.0001	0.0468
76	33A	30	26D	26F	1797	92.82%	0.1741	0.1529	-4617.56	0.0000	0.0022	0.0000	0.0363	0.2238
77	33A	30	26E	26F	1799	92.92%	0.1732	0.1520	-4624.02	0.0000	0.0028	0.0000	0.0806	0.0170
78	33A	30	26G	26F	1798	92.87%	0.1752	0.1540	-4618.90	0.0000	0.0035	0.0000	0.0165	0.0823
79	33A	31	26A	26F	1799	92.92%	0.1570	0.1353	-4641.79	0.0000	0.0005	0.0151	0.0056	0.0117
80	33A	31	26B	26F	1796	92.77%	0.1703	0.1489	-4620.98	0.0000	0.0018	0.0405	0.0000	0.0088
81	33A	31	26C	26F	1795	92.72%	0.1644	0.1429	-4625.11	0.0000	0.0005	0.0238	0.0000	0.0285
82	33A	31	26D	26F	1797	92.82%	0.1572	0.1356	-4635.09	0.0000	0.0007	0.0085	0.0038	0.0135
83	33A	31	26E	26F	1799	92.92%	0.1559	0.1342	-4642.01	0.0000	0.0010	0.0100	0.0120	0.0098
84	33A	31	26G	26F	1798	92.87%	0.1570	0.1354	-4637.84	0.0000	0.0012	0.0109	0.0075	0.0559
85	33A	36	26A	26F	1788	92.36%	0.1579	0.1362	-4606.87	0.0000	0.0002	0.0201	0.0037	0.0077
86	33A	36	26B	26F	1785	92.20%	0.1719	0.1505	-4585.41	0.0000	0.0005	0.0087	0.0000	0.0101
87	33A	36	26C	26F	1784	92.15%	0.1656	0.1440	-4589.94	0.0000	0.0002	0.0135	0.0000	0.0233
88	33A	36	26D	26F	1788	92.25%	0.1572	0.1354	-4601.26	0.0000	0.0002	0.0152	0.0099	0.0107
89	33A	36	26E	26F	1788	92.36%	0.1568	0.1350	-4607.13	0.0000	0.0003	0.0120	0.0106	0.0073
90	33A	36	26G	26F	1787	92.30%	0.1577	0.1359	-4603.23	0.0000	0.0003	0.0128	0.0100	0.0472
91	33B	30	26A	26F	1784	92.15%	0.1774	0.1561	-4585.97	0.0000	0.0004	0.0000	0.0120	0.0112
92	33B	30	26B	26F	1781	91.99%	0.1888	0.1678	-4567.02	0.0000	0.0008	0.0000	0.0000	0.0097
93	33B	30	26C	26F	1780	91.94%	0.1821	0.1609	-4572.13	0.0000	0.0004	0.0000	0.0002	0.0219
94	33B	30	26D	26F	1782	92.05%	0.1759	0.1545	-4581.24	0.0000	0.0005	0.0000	0.0477	0.0105
95	33B	30	26E	26F	1784	92.15%	0.1753	0.1539	-4587.35	0.0000	0.0005	0.0000	0.1034	0.0086
96	33B	30	26G	26F	1783	92.10%	0.1767	0.1553	-4582.89	0.0000	0.0007	0.0000	0.0306	0.0423
97	33B	31	26A	26F	1784	92.15%	0.1605	0.1388	-4603.42	0.0000	0.0000	0.0133	0.0080	0.0057
98	33B	31	26B	26F	1781	91.99%	0.1740	0.1528	-4582.46	0.0000	0.0001	0.0332	0.0000	0.0040
99	33B	31	26C	26F	1780	91.94%	0.1675	0.1459	-4587.17	0.0000	0.0001	0.0175	0.0000	0.0130
100	33B	31	26D	26F	1782	92.05%	0.1607	0.1389	-4596.84	0.0000	0.0001	0.0075	0.0060	0.0062

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
101	33B	31	26E	26F	1784	92.15%	0.1595	0.1377	-4603.62	0.0000	0.0001	0.0095	0.0196	0.0048
102	33B	31	26G	26F	1783	92.10%	0.1600	0.1382	-4600.11	0.0000	0.0001	0.0080	0.0166	0.0271
103	33B	36	26A	26F	1773	91.58%	0.1607	0.1388	-4569.36	0.0000	0.0000	0.0182	0.0044	0.0036
104	33B	36	26B	26F	1770	91.43%	0.1748	0.1532	-4547.87	0.0000	0.0001	0.0074	0.0000	0.0040
105	33B	36	26C	26F	1769	91.37%	0.1679	0.1462	-4552.96	0.0000	0.0000	0.0110	0.0000	0.0099
106	33B	36	26D	26F	1771	91.48%	0.1599	0.1380	-4563.80	0.0000	0.0000	0.0136	0.0118	0.0049
107	33B	36	26E	26F	1773	91.58%	0.1597	0.1378	-4569.48	0.0000	0.0001	0.0104	0.0126	0.0034
108	33B	36	26G	26F	1772	91.53%	0.1597	0.1378	-4566.55	0.0000	0.0001	0.0120	0.0213	0.0203
109	34	30	26A	26F	1798	92.87%	0.1778	0.1567	-4609.88	0.0000	0.0027	0.0000	0.0138	0.0030
110	34	30	26B	26F	1795	92.72%	0.1897	0.1689	-4590.31	0.0000	0.0074	0.0000	0.0000	0.0033
111	34	30	26C	26F	1794	92.67%	0.1822	0.1612	-4596.34	0.0000	0.0045	0.0000	0.0002	0.0070
112	34	30	26D	26F	1796	92.77%	0.1761	0.1550	-4605.34	0.0000	0.0049	0.0000	0.0494	0.0029
113	34	30	26E	26F	1798	92.87%	0.1759	0.1547	-4611.06	0.0000	0.0033	0.0000	0.1030	0.0022
114	34	30	26G	26F	1797	92.82%	0.1765	0.1554	-4607.40	0.0000	0.0232	0.0000	0.0644	0.0112
115	34	31	26A	26F	1798	92.87%	0.1628	0.1413	-4625.47	0.0000	0.0001	0.0085	0.0108	0.0014
116	34	31	26B	26F	1795	92.72%	0.1765	0.1553	-4604.19	0.0000	0.0005	0.0252	0.0000	0.0014
117	34	31	26C	26F	1794	92.67%	0.1693	0.1479	-4609.79	0.0000	0.0002	0.0113	0.0000	0.0039
118	34	31	26D	26F	1796	92.77%	0.1624	0.1409	-4619.48	0.0000	0.0002	0.0039	0.0074	0.0016
119	34	31	26E	26F	1798	92.87%	0.1620	0.1405	-4625.41	0.0000	0.0001	0.0052	0.0211	0.0012
120	34	31	26G	26F	1797	92.82%	0.1606	0.1391	-4623.93	0.0000	0.0023	0.0046	0.1031	0.0057
121	34	36	26A	26F	1788	92.36%	0.1607	0.1390	-4597.56	0.0000	0.0001	0.0638	0.0057	0.0007
122	34	36	26B	26F	1785	92.20%	0.1743	0.1519	-4576.49	0.0000	0.0009	0.0314	0.0000	0.0009
123	34	36	26C	26F	1784	92.15%	0.1672	0.1456	-4581.88	0.0000	0.0004	0.0493	0.0000	0.0023
124	34	36	26D	26F	1786	92.25%	0.1593	0.1375	-4592.66	0.0000	0.0003	0.0432	0.0181	0.0009
125	34	36	26E	26F	1788	92.36%	0.1595	0.1378	-4597.90	0.0000	0.0002	0.0480	0.0208	0.0006
126	34	36	26G	26F	1787	92.30%	0.1587	0.1370	-4595.77	0.0000	0.0022	0.0279	0.0575	0.0038
127	35	30	26A	26F	1781	91.99%	0.1716	0.1501	-4574.43	0.0000	0.0012	0.0000	0.0012	0.0069
128	35	30	26B	26F	1778	91.84%	0.1842	0.1630	-4554.28	0.0000	0.0011	0.0000	0.0000	0.0049
129	35	30	26C	26F	1777	91.79%	0.1750	0.1536	-4581.97	0.0000	0.0018	0.0000	0.0004	0.0109
130	35	30	26D	26F	1779	91.89%	0.1694	0.1478	-4570.37	0.0000	0.0015	0.0000	0.0663	0.0059
131	35	30	26E	26F	1781	91.99%	0.1697	0.1482	-4575.52	0.0000	0.0010	0.0000	0.0774	0.0052
132	35	30	26G	26F	1780	91.94%	0.1700	0.1485	-4572.21	0.0000	0.0025	0.0000	0.0656	0.0192
133	35	31	26A	26F	1781	91.99%	0.1580	0.1361	-4588.28	0.0000	0.0000	0.0037	0.0082	0.0036
134	35	31	26B	26F	1778	91.84%	0.1726	0.1511	-4566.19	0.0000	0.0000	0.0121	0.0000	0.0021
135	35	31	26C	26F	1777	91.79%	0.1633	0.1415	-4573.90	0.0000	0.0000	0.0048	0.0001	0.0064
136	35	31	26D	26F	1779	91.89%	0.1569	0.1350	-4583.02	0.0000	0.0000	0.0018	0.0119	0.0034
137	35	31	26E	26F	1781	91.99%	0.1572	0.1354	-4588.13	0.0000	0.0000	0.0027	0.0136	0.0031
138	35	31	26G	26F	1780	91.94%	0.1560	0.1341	-4586.43	0.0000	0.0001	0.0021	0.0699	0.0113
139	35	36	26A	26F	1770	91.43%	0.1561	0.1341	-4556.24	0.0000	0.0000	0.0539	0.0048	0.0023
140	35	36	26B	26F	1767	91.27%	0.1707	0.1490	-4534.38	0.0000	0.0001	0.0439	0.0000	0.0020
141	35	36	26C	26F	1766	91.22%	0.1613	0.1393	-4542.12	0.0000	0.0001	0.0479	0.0000	0.0046
142	35	36	26D	26F	1768	91.32%	0.1540	0.1319	-4552.08	0.0000	0.0001	0.0318	0.0280	0.0023
143	35	36	26E	26F	1770	91.43%	0.1549	0.1329	-4556.57	0.0000	0.0000	0.0496	0.0165	0.0020
144	35	36	26G	26F	1769	91.37%	0.1541	0.1321	-4554.42	0.0000	0.0001	0.0253	0.0501	0.0089
145	37	30	26A	26F	1799	92.92%	0.1871	0.1662	-4609.25	0.0000	0.0000	0.0000	0.0138	0.0053
146	37	30	26B	26F	1796	92.77%	0.1971	0.1765	-4591.65	0.0000	0.0000	0.0000	0.0000	0.0042
147	37	30	26C	26F	1795	92.72%	0.1895	0.1686	-4597.95	0.0000	0.0000	0.0000	0.0015	0.0093
148	37	30	26D	26F	1797	92.82%	0.1861	0.1652	-4604.02	0.0000	0.0000	0.0000	0.0477	0.0050
149	37	30	26E	26F	1799	92.92%	0.1843	0.1634	-4611.42	0.0000	0.0000	0.0000	0.2488	0.0033
150	37	30	26G	26F	1798	92.87%	0.1873	0.1665	-4605.13	0.0000	0.0000	0.0000	0.0129	0.0284

1995 (Tolal:1936)

					% OF USEABLE				AMSR	A GROUP	M GROUP	S GROUP	R GROUP
A?	M?	S?	R?	N	OBSERVATIONS	R2	ADJ R2	LLF	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE
37	31	26A	26F	1799	92.92%	0.1706	0.1493	-4626.68	0.0000	0.0000	0.0161	0.0088	0.0021
37	31	26B	26F	1796	92.77%	0.1824	0.1614	-4607.28	0.0000	0.0000	0.0413	0.0000	0.0014
37	31	26C	26F	1795	92.72%	0.1748	0.1535	-4613.42	0.0000	0.0000	0.0188	0.0003	0.0043
37	31	26D	26F	1797	92.82%	0.1712	0.1499	-4619.67	0.0000	0.0000	0.0098	0.0065	0.0024
37	31	26E	26F	1799	92.92%	0.1685	0.1471	-4628.07	0.0000	0.0000	0.0108	0.0678	0.0014
37	31	26G	26F	1798	92.87%	0.1711	0.1499	-4622.20	0.0000	0.0000	0.0130	0.0062	0.0163
37	36	26A	26F	1788	92.36%	0.1692	0.1477	-4594.34	0.0000	0.0000	0.0259	0.0059	0.0013
37	36	26B	26F	1785	92.20%	0.1820	0.1608	-4573.99	0.0000	0.0000	0.0107	0.0000	0.0014
37	36	26C	26F	1784	92.15%	0.1738	0.1524	-4580.72	0.0000	0.0000	0.0159	0.0001	0.0032
37	36	26D	26F	1786	92.25%	0.1687	0.1472	-4588.51	0.0000	0.0000	0.0234	0.0166	0.0017
37	36	26E	26F	1788	92.36%	0.1671	0.1456	-4595.71	0.0000	0.0000	0.0155	0.0557	0.0010
37	36	26G	26F	1787	92.30%	0.1696	0.1481	-4590.05	0.0000	0.0000	0.0212	0.0077	0.0123
MAX				1800	92.98%	0.1971	0.1765	-4534.36	0.0000	0.0232	0.0995	0.2488	0.2238
MIN				1766	91.22%	0.1540	0.1319	-4642.01	0.0000	0.0000	0.0000	0.0000	0.0006

PCTSFAT

Table B.3. Combinations of Avoidance, Modification, Substitution, and Replacement. Dependent Variable: Percent of Calories from Saturated Fat, 1996.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE SERVATIO	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
1	27	30	26A	26F	1730	92.17%	0.1690	0.1468	-4448.87	0.0000	0.0000	0.0000	0.0217	0.0067
2	27	30	26B	26F	1731	92.22%	0.1752	0.1531	-4443.98	0.0000	0.0000	0.0000	0.0001	0.0013
3	27	30	26C	26F	1731	92.22%	0.1727	0.1506	-4447.67	0.0000	0.0000	0.0000	0.0008	0.0048
4	27	30	26D	26F	1730	92.17%	0.1748	0.1527	-4443.42	0.0000	0.0000	0.0000	0.0003	0.0118
5	27	30	26E	26F	1726	91.96%	0.1716	0.1494	-4437.51	0.0000	0.0000	0.0000	0.0052	0.0124
6	27	30	26G	26F	1730	92.17%	0.1673	0.1451	-4450.34	0.0000	0.0000	0.0000	0.1310	0.0166
7	27	31	26A	26F	1731	92.22%	0.1647	0.1424	-4455.33	0.0000	0.0000	0.0002	0.0482	0.0053
8	27	31	26B	26F	1732	92.27%	0.1729	0.1508	-4448.42	0.0000	0.0000	0.0003	0.0000	0.0011
9	27	31	26C	26F	1732	92.27%	0.1685	0.1463	-4454.13	0.0000	0.0000	0.0006	0.0021	0.0037
10	27	31	26D	26F	1731	92.22%	0.1729	0.1508	-4447.44	0.0000	0.0000	0.0001	0.0000	0.0126
11	27	31	26E	26F	1727	92.01%	0.1688	0.1465	-4442.49	0.0000	0.0000	0.0002	0.0041	0.0119
12	27	31	26G	26F	1731	92.22%	0.1650	0.1427	-4454.86	0.0000	0.0000	0.0001	0.1133	0.0173
13	27	36	26A	26F	1710	91.10%	0.1575	0.1348	-4412.54	0.0000	0.0000	0.0684	0.0081	0.0014
14	27	36	26B	26F	1711	91.16%	0.1657	0.1432	-4405.77	0.0000	0.0000	0.1220	0.0000	0.0002
15	27	36	26C	26F	1711	91.16%	0.1621	0.1394	-4410.64	0.0000	0.0000	0.0874	0.0001	0.0008
16	27	36	26D	26F	1710	91.10%	0.1652	0.1427	-4405.31	0.0000	0.0000	0.0619	0.0000	0.0031
17	27	36	26E	26F	1707	90.94%	0.1615	0.1388	-4402.03	0.0000	0.0000	0.0798	0.0007	0.0029
18	27	36	26G	26F	1711	91.16%	0.1566	0.1338	-4415.43	0.0000	0.0000	0.0524	0.0449	0.0047
19	28	30	26A	26F	1730	92.17%	0.1700	0.1478	-4447.78	0.0000	0.0000	0.0000	0.0156	0.0055
20	28	30	26B	26F	1731	92.22%	0.1760	0.1540	-4443.12	0.0000	0.0000	0.0001	0.0001	0.0010
21	28	30	26C	26F	1731	92.22%	0.1735	0.1514	-4446.88	0.0000	0.0000	0.0000	0.0007	0.0035
22	28	30	26D	26F	1730	92.17%	0.1759	0.1539	-4442.25	0.0000	0.0000	0.0001	0.0001	0.0097
23	28	30	26E	26F	1726	91.96%	0.1719	0.1497	-4437.18	0.0000	0.0000	0.0000	0.0079	0.0087
24	28	30	26G	26F	1730	92.17%	0.1682	0.1460	-4449.45	0.0000	0.0000	0.0000	0.0834	0.0136
25	28	31	26A	26F	1731	92.22%	0.1665	0.1442	-4453.50	0.0000	0.0000	0.0004	0.0345	0.0040
26	28	31	26B	26F	1732	92.27%	0.1744	0.1523	-4446.89	0.0000	0.0000	0.0006	0.0000	0.0008
27	28	31	26C	26F	1732	92.27%	0.1701	0.1479	-4452.48	0.0000	0.0000	0.0011	0.0015	0.0025
28	28	31	26D	26F	1731	92.22%	0.1747	0.1527	-4445.55	0.0000	0.0000	0.0003	0.0000	0.0097
29	28	31	26E	26F	1727	92.01%	0.1697	0.1474	-4441.56	0.0000	0.0000	0.0004	0.0067	0.0079
30	28	31	26G	26F	1731	92.22%	0.1665	0.1442	-4453.29	0.0000	0.0000	0.0002	0.0666	0.0134
31	28	36	26A	26F	1710	91.10%	0.1594	0.1366	-4410.69	0.0000	0.0000	0.0811	0.0047	0.0013
32	28	36	26B	26F	1711	91.16%	0.1671	0.1446	-4404.37	0.0000	0.0000	0.1319	0.0000	0.0002
33	28	36	26C	26F	1711	91.16%	0.1634	0.1408	-4409.26	0.0000	0.0000	0.1083	0.0001	0.0006
34	28	36	26D	26F	1710	91.10%	0.1668	0.1442	-4403.75	0.0000	0.0000	0.0804	0.0000	0.0027
35	28	36	26E	26F	1707	90.94%	0.1622	0.1395	-4401.03	0.0000	0.0000	0.0869	0.0012	0.0021
36	28	36	26G	26F	1711	91.16%	0.1580	0.1352	-4414.04	0.0000	0.0000	0.0660	0.0273	0.0040
37	29	30	26A	26F	1730	92.17%	0.1615	0.1391	-4456.62	0.0000	0.0032	0.0000	0.0134	0.0022
38	29	30	26B	26F	1731	92.22%	0.1692	0.1470	-4450.23	0.0000	0.0089	0.0000	0.0000	0.0004
39	29	30	26C	26F	1731	92.22%	0.1663	0.1441	-4454.31	0.0000	0.0043	0.0000	0.0001	0.0015
40	29	30	26D	26F	1730	92.17%	0.1686	0.1464	-4449.84	0.0000	0.0000	0.0000	0.0000	0.0047
41	29	30	26E	26F	1726	91.96%	0.1640	0.1416	-4445.31	0.0000	0.0053	0.0000	0.0026	0.0045
42	29	30	26G	26F	1730	92.17%	0.1592	0.1368	-4458.71	0.0000	0.0047	0.0000	0.1227	0.0056
43	29	31	26A	26F	1731	92.22%	0.1566	0.1341	-4463.72	0.0000	0.0007	0.0002	0.0320	0.0013
44	29	31	26B	26F	1732	92.27%	0.1665	0.1443	-4455.08	0.0000	0.0034	0.0004	0.0000	0.0003
45	29	31	26C	26F	1732	92.27%	0.1619	0.1395	-4460.96	0.0000	0.0012	0.0009	0.0002	0.0009
46	29	31	26D	26F	1731	92.22%	0.1667	0.1445	-4453.87	0.0000	0.0012	0.0002	0.0000	0.0044

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						% OF USEABLE				AMSR	A GROUP	M GROUP	S GROUP	R GROUP
COMBINATION	A?	M?	S?	R?	N	SERVATIO	R2	ADJ R2	LLF	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE
47	29	31	26E	26F	1727	92.01%	0.1607	0.1382	-4450.82	0.0000	0.0017	0.0003	0.0018	0.0036
48	29	31	26G	26F	1731	92.22%	0.1564	0.1338	-4463.75	0.0000	0.0012	0.0001	0.0988	0.0048
49	29	36	26A	26F	1710	91.10%	0.1489	0.1259	-4421.25	0.0000	0.0010	0.1301	0.0048	0.0003
50	29	36	26B	26F	1711	91.16%	0.1590	0.1363	-4412.60	0.0000	0.0040	0.1975	0.0000	0.0000
51	29	36	26C	26F	1711	91.16%	0.1551	0.1323	-4417.72	0.0000	0.0015	0.1777	0.0000	0.0002
52	29	36	26D	26F	1710	91.10%	0.1585	0.1357	-4412.21	0.0000	0.0015	0.1242	0.0000	0.0010
53	29	36	26E	26F	1707	90.94%	0.1530	0.1301	-4410.58	0.0000	0.0020	0.1443	0.0003	0.0008
54	29	36	26G	26F	1711	91.16%	0.1474	0.1244	-4424.71	0.0000	0.0014	0.0976	0.0401	0.0011
55	32	30	26A	26F	1729	92.12%	0.1731	0.1510	-4442.48	0.0000	0.0000	0.0000	0.0408	0.0063
56	32	30	26B	26F	1730	92.17%	0.1795	0.1576	-4437.31	0.0000	0.0000	0.0001	0.0001	0.0015
57	32	30	26C	26F	1730	92.17%	0.1772	0.1552	-4440.88	0.0000	0.0000	0.0000	0.0010	0.0045
58	32	30	26D	26F	1729	92.12%	0.1792	0.1573	-4436.69	0.0000	0.0000	0.0000	0.0003	0.0111
59	32	30	26E	26F	1725	91.90%	0.1755	0.1534	-4431.30	0.0000	0.0000	0.0000	0.0115	0.0120
60	32	30	26G	26F	1729	92.12%	0.1716	0.1494	-4443.84	0.0000	0.0000	0.0000	0.1955	0.0153
61	32	31	26A	26F	1730	92.17%	0.1676	0.1454	-4450.25	0.0000	0.0000	0.0011	0.0712	0.0042
62	32	31	26B	26F	1731	92.22%	0.1762	0.1542	-4442.90	0.0000	0.0000	0.0019	0.0000	0.0010
63	32	31	26C	26F	1731	92.22%	0.1722	0.1501	-4448.17	0.0000	0.0000	0.0039	0.0012	0.0029
64	32	31	26D	26F	1730	92.17%	0.1760	0.1540	-4442.08	0.0000	0.0000	0.0011	0.0001	0.0097
65	32	31	26E	26F	1726	91.96%	0.1713	0.1491	-4437.81	0.0000	0.0000	0.0016	0.0074	0.0095
66	32	31	26G	26F	1730	92.17%	0.1678	0.1456	-4449.84	0.0000	0.0000	0.0006	0.1522	0.0136
67	32	36	26A	26F	1709	91.05%	0.1610	0.1383	-4406.92	0.0000	0.0000	0.1395	0.0148	0.0013
68	32	36	26B	26F	1710	91.10%	0.1698	0.1474	-4399.50	0.0000	0.0000	0.2077	0.0000	0.0002
69	32	36	26C	26F	1710	91.10%	0.1663	0.1437	-4404.25	0.0000	0.0000	0.1876	0.0001	0.0007
70	32	36	26D	26F	1709	91.05%	0.1692	0.1467	-4399.18	0.0000	0.0000	0.1342	0.0000	0.0027
71	32	36	26E	26F	1706	90.89%	0.1649	0.1422	-4396.47	0.0000	0.0000	0.1382	0.0013	0.0027
72	32	36	26G	26F	1710	91.10%	0.1604	0.1377	-4409.52	0.0000	0.0000	0.1084	0.0610	0.0043
73	33A	30	26A	26F	1730	92.17%	0.1578	0.1353	-4460.39	0.0000	0.1992	0.0000	0.0089	0.0038
74	33A	30	26B	26F	1731	92.22%	0.1663	0.1440	-4453.22	0.0000	0.2276	0.0000	0.0000	0.0007
75	33A	30	26C	26F	1731	92.22%	0.1631	0.1408	-4457.63	0.0000	0.1794	0.0000	0.0001	0.0027
76	33A	30	26D	26F	1730	92.17%	0.1650	0.1427	-4453.55	0.0000	0.2147	0.0000	0.0000	0.0076
77	33A	30	26E	26F	1726	91.96%	0.1609	0.1385	-4448.51	0.0000	0.1875	0.0000	0.0015	0.0079
78	33A	30	26G	26F	1730	92.17%	0.1558	0.1333	-4462.20	0.0000	0.2052	0.0000	0.0718	0.0103
79	33A	31	26A	26F	1731	92.22%	0.1521	0.1294	-4468.36	0.0000	0.0985	0.0001	0.0226	0.0025
80	33A	31	26B	26F	1732	92.27%	0.1633	0.1410	-4458.41	0.0000	0.1212	0.0002	0.0000	0.0005
81	33A	31	26C	26F	1732	92.27%	0.1581	0.1356	-4464.90	0.0000	0.0856	0.0004	0.0001	0.0019
82	33A	31	26D	26F	1731	92.22%	0.1625	0.1401	-4458.26	0.0000	0.1173	0.0001	0.0000	0.0077
83	33A	31	26E	26F	1727	92.01%	0.1571	0.1345	-4454.56	0.0000	0.0960	0.0001	0.0009	0.0070
84	33A	31	26G	26F	1731	92.22%	0.1522	0.1296	-4467.96	0.0000	0.1023	0.0000	0.0574	0.0097
85	33A	36	26A	26F	1710	91.10%	0.1440	0.1209	-4428.14	0.0000	0.1339	0.0611	0.0031	0.0007
86	33A	36	26B	26F	1711	91.16%	0.1555	0.1327	-4416.20	0.0000	0.1520	0.1158	0.0000	0.0001
87	33A	36	26C	26F	1711	91.16%	0.1510	0.1281	-4421.83	0.0000	0.1028	0.0895	0.0000	0.0004
88	33A	36	26D	26F	1710	91.10%	0.1540	0.1312	-4416.69	0.0000	0.1366	0.0536	0.0000	0.0019
89	33A	36	26E	26F	1707	90.94%	0.1490	0.1260	-4414.61	0.0000	0.1189	0.0722	0.0001	0.0017
90	33A	36	26G	26F	1711	91.16%	0.1429	0.1198	-4429.20	0.0000	0.1218	0.0443	0.0192	0.0028
91	33B	30	26A	26F	1719	91.58%	0.1680	0.1456	-4421.22	0.0000	0.0000	0.0000	0.0087	0.0057
92	33B	30	26B	26F	1720	91.64%	0.1743	0.1521	-4416.27	0.0000	0.0000	0.0000	0.0000	0.0011

						% OF USEABLE				AMSR	A GROUP	M GROUP	S GROUP	R GROUP
COMBINATION	A?	M?	S?	R?	N	SERVATIO	R2	ADJ R2	LLF	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE	F-PVALUE
93	33B	30	26C	26F	1720	91.64%	0.1717	0.1494	-4420.08	0.0000	0.0000	0.0000	0.0003	0.0039
94	33B	30	26D	26F	1719	91.58%	0.1741	0.1518	-4415.56	0.0000	0.0000	0.0000	0.0001	0.0100
95	33B	30	26E	26F	1715	91.37%	0.1693	0.1469	-4411.16	0.0000	0.0000	0.0000	0.0070	0.0083
96	33B	30	26G	26F	1719	91.58%	0.1656	0.1431	-4423.54	0.0000	0.0000	0.0000	0.1105	0.0122
97	33B	31	26A	26F	1720	91.64%	0.1624	0.1399	-4429.02	0.0000	0.0000	0.0005	0.0203	0.0035
98	33B	31	26B	26F	1721	91.69%	0.1712	0.1489	-4421.57	0.0000	0.0000	0.0007	0.0000	0.0007
99	33B	31	26C	26F	1721	91.69%	0.1668	0.1444	-4427.23	0.0000	0.0000	0.0015	0.0004	0.0024
100	33B	31	26D	26F	1720	91.64%	0.1714	0.1491	-4420.42	0.0000	0.0000	0.0004	0.0000	0.0090
101	33B	31	26E	26F	1716	91.42%	0.1655	0.1430	-4417.23	0.0000	0.0000	0.0005	0.0044	0.0066
102	33B	31	26G	26F	1720	91.64%	0.1621	0.1396	-4429.13	0.0000	0.0000	0.0002	0.0767	0.0105
103	33B	36	26A	26F	1699	90.52%	0.1572	0.1342	-4384.20	0.0000	0.0000	0.0846	0.0033	0.0016
104	33B	36	26B	26F	1700	90.57%	0.1658	0.1432	-4376.98	0.0000	0.0000	0.1383	0.0000	0.0002
105	33B	36	26C	26F	1700	90.57%	0.1621	0.1393	-4831.93	0.0000	0.0000	0.1095	0.0000	0.0008
106	33B	36	26D	26F	1699	90.52%	0.1655	0.1428	-4376.37	0.0000	0.0000	0.0787	0.0000	0.0034
107	33B	36	26E	26F	1696	90.36%	0.1598	0.1368	-4375.04	0.0000	0.0000	0.0843	0.0009	0.0023
108	33B	36	26G	26F	1700	90.57%	0.1555	0.1325	-4387.85	0.0000	0.0000	0.0632	0.0351	0.0040
109	34	30	26A	26F	1729	92.12%	0.1672	0.1449	-4448.64	0.0000	0.0000	0.0000	0.0285	0.0020
110	34	30	26B	26F	1730	92.17%	0.1747	0.1527	-4442.34	0.0000	0.0001	0.0002	0.0000	0.0004
111	34	30	26C	26F	1730	92.17%	0.1714	0.1492	-4446.97	0.0000	0.0001	0.0001	0.0011	0.0015
112	34	30	26D	26F	1729	92.12%	0.1734	0.1513	-4442.82	0.0000	0.0001	0.0002	0.0004	0.0041
113	34	30	26E	26F	1725	91.90%	0.1697	0.1474	-4437.39	0.0000	0.0001	0.0001	0.0102	0.0040
114	34	30	26G	26F	1729	92.12%	0.1646	0.1422	-4451.15	0.0000	0.0001	0.0000	0.5911	0.0027
115	34	31	26A	26F	1730	92.17%	0.1645	0.1422	-4453.48	0.0000	0.0000	0.0004	0.0736	0.0015
116	34	31	26B	26F	1731	92.22%	0.1738	0.1518	-4445.36	0.0000	0.0000	0.0008	0.0000	0.0004
117	34	31	26C	26F	1731	92.22%	0.1688	0.1466	-4451.71	0.0000	0.0000	0.0013	0.0030	0.0011
118	34	31	26D	26F	1730	92.17%	0.1728	0.1507	-4445.51	0.0000	0.0000	0.0004	0.0001	0.0043
119	34	31	26E	26F	1726	91.96%	0.1683	0.1460	-4440.93	0.0000	0.0000	0.0005	0.0108	0.0038
120	34	31	26G	26F	1730	92.17%	0.1634	0.1411	-4454.40	0.0000	0.0000	0.0001	0.7325	0.0024
121	34	36	26A	26F	1709	91.05%	0.1573	0.1345	-4410.74	0.0000	0.0000	0.1012	0.0168	0.0004
122	34	36	26B	26F	1710	91.10%	0.1670	0.1445	-4402.39	0.0000	0.0000	0.1654	0.0000	0.0001
123	34	36	26C	26F	1710	91.10%	0.1623	0.1396	-4408.32	0.0000	0.0000	0.1301	0.0003	0.0002
124	34	36	26D	26F	1709	91.05%	0.1653	0.1427	-4403.15	0.0000	0.0000	0.0950	0.0000	0.0010
125	34	36	26E	26F	1706	90.89%	0.1611	0.1383	-4400.35	0.0000	0.0000	0.1034	0.0021	0.0009
126	34	36	26G	26F	1710	91.10%	0.1548	0.1320	-4415.18	0.0000	0.0000	0.0748	0.5546	0.0005
127	35	30	26A	26F	1722	91.74%	0.1552	0.1325	-4438.48	0.0000	0.2574	0.0000	0.0132	0.0020
128	35	30	26B	26F	1723	91.80%	0.1632	0.1408	-4431.81	0.0000	0.3233	0.0000	0.0000	0.0004
129	35	30	26C	26F	1723	91.80%	0.1602	0.1376	-4436.10	0.0000	0.3683	0.0000	0.0002	0.0013
130	35	30	26D	26F	1722	91.74%	0.1626	0.1401	-4431.49	0.0000	0.3270	0.0000	0.0000	0.0045
131	35	30	26E	26F	1718	91.53%	0.1583	0.1356	-4426.64	0.0000	0.3018	0.0000	0.0025	0.0042
132	35	30	26G	26F	1722	91.74%	0.1536	0.1308	-4439.92	0.0000	0.3137	0.0000	0.0797	0.0054
133	35	31	26A	26F	1723	91.80%	0.1507	0.1279	-4445.09	0.0000	0.0862	0.0002	0.0296	0.0013
134	35	31	26B	26F	1724	91.85%	0.1610	0.1386	-4436.13	0.0000	0.1345	0.0004	0.0000	0.0003
135	35	31	26C	26F	1724	91.85%	0.1560	0.1333	-4442.47	0.0000	0.1656	0.0010	0.0004	0.0008
136	35	31	26D	26F	1723	91.80%	0.1606	0.1381	-4435.63	0.0000	0.1882	0.0002	0.0000	0.0043
137	35	31	26E	26F	1719	91.58%	0.1553	0.1326	-4431.77	0.0000	0.1271	0.0003	0.0016	0.0035
138	35	31	26G	26F	1723	91.80%	0.1507	0.1279	-4444.95	0.0000	0.1449	0.0001	0.0856	0.0045

PCTSFAT

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIO	R2	ADJ R2	LLF	AMSR F-PVALUE	A GROUP F-PVALUE	M GROUP F-PVALUE	S GROUP F-PVALUE	R GROUP F-PVALUE
139	35	36	26A	26F	1702	90.68%	0.1462	0.1230	-4399.33	0.0000	0.0192	0.0142	0.0062	0.0004
140	35	36	26B	26F	1703	90.73%	0.1565	0.1336	-4390.53	0.0000	0.0279	0.0262	0.0000	0.0000
141	35	36	26C	26F	1703	90.73%	0.1520	0.1290	-4396.19	0.0000	0.0437	0.0222	0.0000	0.0002
142	35	36	26D	26F	1702	90.68%	0.1554	0.1325	-4390.72	0.0000	0.0486	0.0157	0.0000	0.0011
143	35	36	26E	26F	1699	90.52%	0.1509	0.1278	-4388.04	0.0000	0.0245	0.0141	0.0003	0.0009
144	35	36	26G	26F	1703	90.73%	0.1453	0.1221	-4402.20	0.0000	0.0274	0.0089	0.0368	0.0012
145	37	30	26A	26F	1730	92.17%	0.1665	0.1442	-4451.47	0.0000	0.0001	0.0000	0.0141	0.0024
146	37	30	26B	26F	1731	92.22%	0.1751	0.1531	-4444.06	0.0000	0.0001	0.0000	0.0000	0.0004
147	37	30	26C	26F	1731	92.22%	0.1710	0.1489	-4449.40	0.0000	0.0002	0.0000	0.0002	0.0018
148	37	30	26D	26F	1730	92.17%	0.1729	0.1508	-4445.35	0.0000	0.0003	0.0000	0.0001	0.0050
149	37	30	26E	26F	1726	91.96%	0.1683	0.1460	-4440.88	0.0000	0.0004	0.0000	0.0056	0.0042
150	37	30	26G	26F	1730	92.17%	0.1648	0.1425	-4453.01	0.0000	0.0001	0.0000	0.1145	0.0060
151	37	31	26A	26F	1731	92.22%	0.1618	0.1394	-4458.34	0.0000	0.0000	0.0002	0.0316	0.0015
152	37	31	26B	26F	1732	92.27%	0.1729	0.1508	-4448.42	0.0000	0.0000	0.0005	0.0000	0.0003
153	37	31	26C	26F	1732	92.27%	0.1668	0.1446	-4455.89	0.0000	0.0001	0.0009	0.0004	0.0010
154	37	31	26D	26F	1731	92.22%	0.1710	0.1489	-4449.45	0.0000	0.0001	0.0002	0.0000	0.0049
155	37	31	26E	26F	1727	92.01%	0.1651	0.1428	-4446.24	0.0000	0.0001	0.0003	0.0039	0.0034
156	37	31	26G	26F	1731	92.22%	0.1621	0.1397	-4457.88	0.0000	0.0000	0.0001	0.0984	0.0053
157	37	36	26A	26F	1710	91.10%	0.1540	0.1312	-4416.09	0.0000	0.0000	0.0978	0.0049	0.0004
158	37	36	26B	26F	1711	91.16%	0.1655	0.1429	-4406.05	0.0000	0.0000	0.1674	0.0000	0.0001
159	37	36	26C	26F	1711	91.16%	0.1598	0.1371	-4412.93	0.0000	0.0001	0.1297	0.0000	0.0002
160	37	36	26D	26F	1710	91.10%	0.1629	0.1402	-4407.74	0.0000	0.0001	0.0886	0.0000	0.0012
161	37	36	26E	26F	1707	90.94%	0.1574	0.1345	-4406.19	0.0000	0.0001	0.1029	0.0006	0.0008
162	37	36	26G	26F	1711	91.16%	0.1531	0.1302	-4418.98	0.0000	0.0000	0.0756	0.0004	0.0014
MAX					1732	92.27%	0.1795	0.1576	-4375.04	0.0000	0.3683	0.2077	0.7325	0.0173
MIN					1696	90.36%	0.1429	0.1209	-4831.93	0.0000	0.0000	0.0000	0.0000	0.0000

Appendix C.

Combination of Avoidance, Modification, Substitution, and Replacement

Dependent Variable: Met Dietary Guideline or NOT for Fat (< 30% of Calories from Fat).

Table C.1 - - 1994
Table C.2 - - 1995
Table C.3 - - 1996

Table C.1. Combinations of Avoidance, Modification, Substitution, and Replacement. Dependent Variable: Met Dietary Guideline or Not for Total Fat, 1994.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET DIETARY GUIDELINES	MCFADDEN'S R2	% OF CORRECT PREDICTIONS	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
1	27	30	26A	26F	1663	90.58%	33.13%	0.0928	71.56	-958.13	0.0000	0.0083	0.0089	0.0140	0.6221
2	27	30	26B	26F	1666	90.74%	33.07%	0.0969	72.15	-954.97	0.0000	0.0097	0.0315	0.0003	0.5517
3	27	30	26C	26F	1664	90.63%	33.11%	0.0794	70.67	-945.79	0.0000	0.0238	0.0468	0.0000	0.6445
4	27	30	26D	26F	1666	90.74%	33.07%	0.0949	71.37	-957.04	0.0000	0.0295	0.0134	0.0019	0.7627
5	27	30	26E	26F	1666	90.74%	33.07%	0.0964	70.41	-955.49	0.0000	0.0123	0.0191	0.0005	0.5460
6	27	30	26G	26F	1664	90.63%	33.11%	0.0951	71.21	-955.46	0.0000	0.0148	0.0241	0.0007	0.7139
7	27	31	26A	26F	1663	90.58%	33.13%	0.0904	70.84	-960.71	0.0000	0.0019	0.1290	0.0138	0.4839
8	27	31	26B	26F	1666	90.74%	33.07%	0.0955	70.83	-956.45	0.0000	0.0028	0.1317	0.0001	0.4417
9	27	31	26C	26F	1664	90.63%	33.11%	0.1024	71.76	-947.74	0.0000	0.0072	0.3379	0.0000	0.5315
10	27	31	26D	26F	1666	90.74%	33.07%	0.0927	70.47	-959.41	0.0000	0.0085	0.1530	0.0019	0.1417
11	27	31	26E	26F	1666	90.74%	33.07%	0.0937	69.87	-958.28	0.0000	0.0030	0.2594	0.0008	0.3949
12	27	31	26G	26F	1664	90.63%	33.05%	0.0939	71.33	-958.72	0.0000	0.0048	0.1228	0.0002	0.5775
13	27	36	26A	26F	1659	90.36%	33.15%	0.0914	70.46	-957.51	0.0000	0.0011	0.0425	0.0115	0.4819
14	27	36	26B	26F	1662	90.52%	33.09%	0.0968	70.22	-952.91	0.0000	0.0017	0.0278	0.0001	0.4478
15	27	36	26C	26F	1660	90.41%	33.07%	0.1051	71.51	-942.87	0.0000	0.0048	0.0380	0.0000	0.5829
16	27	36	26D	26F	1662	90.52%	33.09%	0.0941	70.40	-955.80	0.0000	0.0057	0.0321	0.0012	0.8607
17	27	36	26E	26F	1662	90.52%	33.09%	0.0949	70.34	-954.95	0.0000	0.0020	0.0835	0.0008	0.4261
18	27	36	26G	26F	1660	90.41%	33.07%	0.0955	71.02	-952.92	0.0000	0.0031	0.0155	0.0001	0.8203
19	28	30	26A	26F	1669	90.90%	33.07%	0.0930	70.94	-960.77	0.0000	0.0123	0.0038	0.0098	0.5668
20	28	30	26B	26F	1672	91.07%	33.01%	0.0962	71.23	-958.45	0.0000	0.0211	0.0132	0.0003	0.4979
21	28	30	26C	26F	1670	90.96%	32.99%	0.1032	71.32	-949.72	0.0000	0.0428	0.0235	0.0000	0.5795
22	28	30	26D	26F	1672	91.07%	33.01%	0.0949	70.87	-959.55	0.0000	0.0319	0.0072	0.0010	0.4741
23	28	30	26E	26F	1672	91.07%	33.01%	0.0955	70.96	-957.92	0.0000	0.0097	0.0126	0.0003	0.6284
24	28	30	26G	26F	1670	90.96%	32.99%	0.1008	73.05	-957.92	0.0000	0.0168	0.0092	0.0011	0.4048
25	28	31	26A	26F	1669	90.90%	33.07%	0.0899	70.94	-984.06	0.0002	0.0078	0.1057	0.0092	0.3802
26	28	31	26B	26F	1672	91.07%	33.01%	0.0942	71.59	-960.62	0.0000	0.0168	0.1110	0.0002	0.3825
27	28	31	26C	26F	1670	90.96%	32.99%	0.1008	70.78	-952.25	0.0000	0.0290	0.2948	0.0000	0.4457
28	28	31	26D	26F	1672	91.07%	33.01%	0.0921	71.05	-962.87	0.0000	0.0250	0.1269	0.0011	0.5553
29	28	31	26E	26F	1672	91.07%	33.01%	0.0920	70.99	-963.00	0.0000	0.0204	0.1923	0.0015	0.3022
30	28	31	26G	26F	1670	90.96%	32.99%	0.0938	71.20	-959.89	0.0000	0.0077	0.1240	0.0001	0.4595
31	28	36	26A	26F	1665	90.69%	33.09%	0.0905	71.47	-961.36	0.0001	0.0062	0.0805	0.0075	0.3749
32	28	36	26B	26F	1668	90.85%	33.03%	0.0950	70.75	-957.66	0.0000	0.0145	0.0413	0.0001	0.3475
33	28	36	26C	26F	1666	90.74%	33.01%	0.1030	70.71	-947.91	0.0000	0.0274	0.0504	0.0000	0.4748
34	28	36	26D	26F	1668	90.85%	33.03%	0.0931	70.88	-959.64	0.0000	0.0218	0.0433	0.0007	0.5718
35	28	36	26E	26F	1668	90.85%	33.03%	0.0926	71.10	-960.18	0.0000	0.0188	0.0764	0.0013	0.3110
36	28	36	26G	26F	1666	90.74%	33.01%	0.0949	72.92	-956.39	0.0000	0.0057	0.0243	0.0001	0.4791
37	29	30	26A	26F	1668	90.85%	33.09%	0.0895	71.16	-984.18	0.0002	0.4397	0.0032	0.0093	0.5798
38	29	30	26B	26F	1671	91.01%	33.03%	0.0929	71.87	-961.62	0.0000	0.4943	0.0125	0.0003	0.4917
39	29	30	26C	26F	1669	90.90%	33.01%	0.1015	70.88	-951.12	0.0000	0.2729	0.0265	0.0000	0.6328
40	29	30	26D	26F	1871	91.01%	33.03%	0.0924	70.97	-982.18	0.0000	0.4381	0.0071	0.0005	0.7646
41	29	30	26E	26F	1671	91.01%	33.03%	0.0932	70.80	-961.29	0.0000	0.3044	0.0069	0.0002	0.5127
42	29	30	26G	26F	1669	90.90%	33.01%	0.0915	71.08	-981.71	0.0000	0.5182	0.0097	0.0005	0.7024
43	29	31	26A	26F	1668	90.85%	33.09%	0.0862	70.92	-967.87	0.0022	0.1901	0.0854	0.0110	0.4442
44	29	31	26B	26F	1871	91.01%	33.03%	0.0910	71.04	-963.70	0.0001	0.2585	0.0885	0.0001	0.3985
45	29	31	26C	26F	1669	90.90%	33.01%	0.0991	70.70	-953.74	0.0000	0.1200	0.2769	0.0000	0.5454
46	29	31	26D	26F	1671	91.01%	33.03%	0.0896	70.92	-965.18	0.0002	0.1981	0.1160	0.0005	0.6568
47	29	31	26E	26F	1671	91.01%	33.03%	0.0900	70.80	-927.09	0.0002	0.1247	0.1930	0.0003	0.3918
48	29	31	26G	26F	1669	90.90%	33.01%	0.0893	70.52	-964.05	0.0001	0.2878	0.0873	0.0003	0.6005
49	29	36	26A	26F	1663	90.58%	33.13%	0.0868	70.98	-984.73	0.0014	0.2592	0.0565	0.0081	0.4217
50	29	36	26B	26F	1666	90.74%	33.07%	0.0917	71.13	-960.47	0.0000	0.3395	0.0369	0.0001	0.3762
51	29	36	26C	26F	1664	90.63%	33.05%	0.1012	70.97	-949.10	0.0000	0.1742	0.0529	0.0000	0.5871
52	29	36	26D	26F	1666	90.74%	33.07%	0.0905	70.53	-961.74	0.0001	0.2658	0.0453	0.0002	0.6640
53	29	36	26E	26F	1668	90.74%	33.07%	0.0907	70.53	-961.50	0.0001	0.1714	0.0868	0.0002	0.3926
54	29	36	26G	26F	1664	90.63%	33.05%	0.0907	70.91	-980.16	0.0001	0.3768	0.0212	0.0001	0.5911
55	32	30	26A	26F	1870	90.96%	32.89%	0.0898	70.98	-963.94	0.0002	0.3710	0.0082	0.0088	0.5385
56	32	30	26B	26F	1672	91.07%	32.89%	0.0929	71.29	-960.70	0.0000	0.4142	0.0220	0.0002	0.4541
57	32	30	26C	26F	1670	90.96%	32.87%	0.1001	70.38	-951.69	0.0000	0.6258	0.0290	0.0000	0.5246
58	32	30	26D	26F	1672	91.07%	32.89%	0.0919	71.11	-981.80	0.0000	0.4897	0.0094	0.0008	0.8701
59	32	30	26E	26F	1672	91.07%	32.89%	0.0919	70.69	-981.74	0.0000	0.4229	0.0111	0.0007	0.4311

DGUIDE

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET DIETARY GUIDELINES	MCFADDEN'S R2	% OF CORRECT PREDICTIONS	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
60	32	30	26G	26F	1671	91.01%	32.91%	0.0911	71.33	-962.23	0.0001	0.4222	0.0149	0.0009	0.6335
61	32	31	26A	26F	1669	90.90%	32.95%	0.0863	70.64	-966.58	0.0021	0.2224	0.1358	0.0095	0.3479
62	32	31	26B	26F	1672	91.07%	32.89%	0.0911	70.75	-962.62	0.0001	0.2817	0.1327	0.0001	0.3344
63	32	31	26C	26F	1670	90.98%	32.67%	0.0977	70.60	-954.23	0.0000	0.4814	0.3376	0.0000	0.3980
64	32	31	26D	26F	1672	91.07%	32.89%	0.0891	70.40	-964.74	0.0003	0.3480	0.1598	0.0007	0.5112
65	32	31	26E	26F	1672	91.07%	32.89%	0.0886	70.81	-965.10	0.0004	0.2706	0.2419	0.0011	0.2772
66	32	31	26G	26F	1670	90.96%	32.87%	0.0889	70.60	-963.58	0.0002	0.3211	0.1212	0.0004	0.4800
67	32	36	26A	26F	1666	90.74%	33.01%	0.0872	71.25	-964.57	0.0012	0.2216	0.0773	0.0072	0.3806
68	32	36	26B	26F	1668	90.85%	32.91%	0.0918	70.32	-959.82	0.0000	0.2997	0.0490	0.0001	0.3420
69	32	36	26C	26F	1666	90.74%	32.69%	0.0998	70.59	-949.96	0.0000	0.5081	0.0532	0.0000	0.4451
70	32	36	26D	26F	1666	90.85%	32.91%	0.0900	70.50	-981.65	0.0001	0.3552	0.0525	0.0004	0.5506
71	32	36	26E	26F	1668	90.85%	32.91%	0.0894	71.04	-962.33	0.0002	0.2743	0.0871	0.0008	0.3029
72	32	36	26G	26F	1667	90.80%	32.93%	0.0902	70.13	-961.09	0.0001	0.3546	0.0311	0.0002	0.5092
73	33A	30	26A	26F	1672	91.07%	33.07%	0.0901	70.89	-985.61	0.0002	0.2920	0.0048	0.0115	0.6593
74	33A	30	26B	26F	1674	91.18%	32.97%	0.0933	71.45	-962.32	0.0000	0.2965	0.0185	0.0003	0.5765
75	33A	30	26C	26F	1672	91.07%	32.95%	0.1010	70.46	-952.81	0.0000	0.3545	0.0284	0.0000	0.8304
76	33A	30	26D	26F	1674	91.18%	32.97%	0.0925	70.79	-983.17	0.0000	0.3526	0.0089	0.0007	0.7838
77	33A	30	26E	26F	1674	91.18%	32.97%	0.0927	70.73	-982.89	0.0000	0.3351	0.0100	0.0006	0.5876
78	33A	30	26G	26F	1673	91.12%	32.99%	0.0924	70.65	-962.90	0.0000	0.2401	0.0182	0.0005	0.7518
79	33A	31	26A	26F	1671	91.01%	33.03%	0.0868	70.86	-968.08	0.0014	0.1209	0.1040	0.0144	0.4703
80	33A	31	26B	26F	1674	91.18%	32.97%	0.0918	70.43	-964.11	0.0000	0.1425	0.1063	0.0002	0.4811
81	33A	31	26C	26F	1672	91.07%	32.95%	0.0987	70.40	-955.20	0.0000	0.0193	0.3178	0.0000	0.5037
82	33A	31	26D	26F	1674	91.16%	32.97%	0.0899	70.61	-965.90	0.0001	0.1862	0.1323	0.0008	0.8420
83	33A	31	26E	26F	1674	91.16%	32.97%	0.0898	70.61	-986.04	0.0002	0.1472	0.1981	0.0010	0.4059
84	33A	31	26G	26F	1672	91.07%	32.95%	0.0907	70.75	-963.67	0.0001	0.0952	0.1029	0.0002	0.5900
85	33A	36	26A	26F	1668	90.85%	33.09%	0.0678	70.92	-965.96	0.0008	0.1135	0.0578	0.0106	0.4962
86	33A	36	26B	26F	1670	90.96%	32.99%	0.0925	70.78	-961.06	0.0000	0.1273	0.0354	0.0001	0.4596
87	33A	36	26C	26F	1668	90.85%	32.97%	0.1010	70.26	-950.75	0.0000	0.1780	0.0485	0.0000	0.5504
88	33A	36	26D	26F	1670	90.98%	32.99%	0.0910	70.54	-982.64	0.0001	0.1563	0.0418	0.0004	0.8787
89	33A	36	26E	26F	1670	90.96%	32.99%	0.0905	70.60	-963.13	0.0001	0.1372	0.0702	0.0008	0.4335
90	33A	36	26G	26F	1669	90.90%	33.01%	0.0922	70.82	-960.98	0.0000	0.0937	0.0217	0.0001	0.8366
91	33B	30	26A	26F	1653	90.03%	33.33%	0.0904	70.24	-957.05	0.0002	0.3193	0.0022	0.0051	0.5833
92	33B	30	26B	26F	1655	90.14%	33.23%	0.0931	71.12	-954.35	0.0000	0.5408	0.0093	0.0002	0.4823
93	33B	30	26C	26F	1653	90.03%	33.21%	0.1016	70.86	-944.04	0.0000	0.4100	0.0153	0.0000	0.8022
94	33B	30	26D	26F	1655	90.14%	33.23%	0.0923	70.88	-955.18	0.0000	0.5211	0.0043	0.0004	0.7475
95	33B	30	26E	26F	1655	90.14%	33.23%	0.0930	70.33	-954.41	0.0000	0.2885	0.0060	0.0002	0.5061
96	33B	30	26G	26F	1654	90.09%	33.25%	0.0928	70.38	-954.47	0.0000	0.3848	0.0090	0.0002	0.6995
97	33B	31	26A	26F	1652	89.98%	33.29%	0.0861	70.28	-960.60	0.0028	0.2738	0.1031	0.0064	0.3844
98	33B	31	26B	26F	1655	90.14%	33.23%	0.0907	71.00	-956.81	0.0001	0.4574	0.0895	0.0001	0.3428
99	33B	31	26C	26F	1653	90.03%	33.21%	0.0967	70.60	-947.09	0.0000	0.3885	0.2828	0.0000	0.4599
100	33B	31	26D	26F	1655	90.14%	33.23%	0.0890	70.09	-958.65	0.0003	0.4411	0.1187	0.0004	0.5821
101	33B	31	26E	26F	1655	90.14%	33.23%	0.0893	70.45	-958.30	0.0003	0.2252	0.2038	0.0003	0.3330
102	33B	31	26G	26F	1653	90.03%	33.21%	0.0899	70.36	-958.30	0.0001	0.3152	0.0996	0.0001	0.5238
103	33B	36	26A	26F	1649	89.81%	33.35%	0.0872	70.53	-958.31	0.0013	0.2793	0.0495	0.0045	0.3997
104	33B	36	26B	26F	1651	89.92%	33.25%	0.0916	70.81	-953.78	0.0000	0.5046	0.0288	0.0001	0.3322
105	33B	36	26C	26F	1649	89.81%	33.23%	0.1010	70.47	-942.60	0.0000	0.4205	0.0358	0.0000	0.5004
106	33B	36	26D	26F	1651	89.92%	33.25%	0.0901	69.84	-955.38	0.0001	0.4917	0.0324	0.0002	0.8097
107	33B	36	26E	26F	1651	89.92%	33.25%	0.0998	70.20	-955.37	0.0001	0.2481	0.0835	0.0003	0.3522
108	33B	36	26G	26F	1650	89.87%	33.27%	0.0916	70.55	-953.40	0.0000	0.3233	0.0184	0.0000	0.5811
109	34	30	26A	26F	1669	90.90%	33.01%	0.0966	71.80	-956.31	0.0000	0.0002	0.0240	0.0179	0.8500
110	34	30	26B	26F	1672	91.07%	32.95%	0.1000	71.41	-953.83	0.0000	0.0003	0.0880	0.0007	0.5837
111	34	30	26C	26F	1670	90.96%	32.93%	0.1077	71.06	-944.38	0.0000	0.0004	0.1043	0.0000	0.6585
112	34	30	26D	26F	1672	91.07%	32.95%	0.0992	70.93	-954.64	0.0000	0.0004	0.0411	0.0014	0.7792
113	34	30	26E	26F	1672	91.07%	32.95%	0.0998	70.87	-954.04	0.0000	0.0003	0.0481	0.0009	0.5893
114	34	30	26G	26F	1670	90.98%	32.93%	0.0980	71.82	-958.85	0.0000	0.0040	0.0347	0.0147	0.7092
115	34	31	26A	26F	1669	90.90%	33.01%	0.0952	71.68	-957.80	0.0000	0.0000	0.1384	0.0242	0.5196
116	34	31	26B	26F	1672	91.07%	32.95%	0.0996	71.35	-954.28	0.0000	0.0000	0.1249	0.0004	0.4989
117	34	31	26C	26F	1670	90.96%	32.93%	0.1067	71.74	-945.36	0.0000	0.0001	0.3524	0.0000	0.5703
118	34	31	26D	26F	1672	91.07%	32.95%	0.0981	70.75	-955.85	0.0000	0.0000	0.1809	0.0018	0.8758

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET DIETARY GUIDELINES	MCFADDEN'S R2	% OF CORRECT PREDICTIONS	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
119	34	31	26E	26F	1672	91.07%	32.95%	0.0983	71.47	-955.63	0.0000	0.0000	0.2495	0.0017	0.4633
120	34	31	26G	26F	1670	90.96%	32.93%	0.0953	71.08	-957.43	0.0000	0.0007	0.1150	0.0129	0.5950
121	34	36	26A	26F	1666	90.74%	33.01%	0.0972	70.95	-954.01	0.0000	0.0000	0.0188	0.0204	0.5722
122	34	36	26B	26F	1669	90.90%	32.95%	0.1018	71.72	-950.21	0.0000	0.0000	0.0106	0.0003	0.5385
123	34	36	26C	26F	1667	90.80%	32.93%	0.1101	71.51	-940.04	0.0000	0.0000	0.0152	0.0000	0.8388
124	34	36	26D	26F	1669	90.90%	32.95%	0.1004	70.64	-951.66	0.0000	0.0000	0.0141	0.0012	0.7367
125	34	36	26E	26F	1669	90.90%	32.95%	0.1003	70.94	-951.80	0.0000	0.0000	0.0255	0.0015	0.5241
126	34	36	26G	26F	1667	90.80%	32.93%	0.0975	71.09	-953.42	0.0000	0.0002	0.0088	0.0112	0.8661
127	35	30	26A	26F	1657	90.25%	33.07%	0.0917	70.97	-955.29	0.0000	0.0344	0.0111	0.0091	0.5419
128	35	30	26B	26F	1660	90.41%	33.01%	0.0960	71.81	-951.84	0.0000	0.0328	0.0409	0.0001	0.4926
129	35	30	26C	26F	1658	90.31%	32.99%	0.1042	71.71	-941.86	0.0000	0.0248	0.0741	0.0000	0.5417
130	35	30	26D	26F	1660	90.41%	33.01%	0.0942	71.33	-953.68	0.0000	0.0553	0.0194	0.0008	0.6907
131	35	30	26E	26F	1860	90.41%	33.01%	0.0958	70.72	-952.06	0.0000	0.0321	0.0248	0.0002	0.4572
132	35	30	26G	26F	1658	90.31%	32.99%	0.0935	71.11	-953.07	0.0000	0.0901	0.0220	0.0007	0.8191
133	35	31	26A	26F	1657	90.25%	33.07%	0.0898	71.21	-957.24	0.0001	0.0028	0.0831	0.0084	0.3937
134	35	31	26B	26F	1660	90.41%	33.01%	0.0951	70.90	-952.78	0.0000	0.0038	0.0964	0.0001	0.3891
135	35	31	26C	26F	1658	90.31%	32.99%	0.1029	71.71	-943.16	0.0000	0.0028	0.2740	0.0000	0.4280
136	35	31	26D	26F	1660	90.41%	33.01%	0.0926	70.90	-955.34	0.0000	0.0049	0.0991	0.0007	0.5478
137	35	31	26E	26F	1660	90.41%	33.01%	0.0936	70.96	-954.32	0.0000	0.0030	0.1916	0.0003	0.3094
138	35	31	26G	26F	1658	90.31%	32.99%	0.0923	71.71	-954.28	0.0000	0.0185	0.0950	0.0004	0.4838
139	35	36	26A	26F	1653	90.03%	33.09%	0.0959	71.14	-948.69	0.0000	0.0000	0.0007	0.0080	0.4094
140	35	36	26B	26F	1656	90.20%	33.03%	0.1015	71.14	-943.89	0.0000	0.0000	0.0008	0.0001	0.3980
141	35	36	26C	26F	1654	90.09%	33.01%	0.1107	71.10	-932.97	0.0000	0.0000	0.0007	0.0000	0.4549
142	35	36	26D	26F	1656	90.20%	33.03%	0.0996	70.95	-945.95	0.0000	0.0000	0.0004	0.0003	0.5843
143	35	36	26E	26F	1656	90.20%	33.03%	0.0996	71.01	-945.94	0.0000	0.0000	0.0014	0.0004	0.3322
144	35	36	26G	26F	1654	90.09%	33.01%	0.0984	71.58	-945.88	0.0000	0.0002	0.0006	0.0005	0.4814
145	37	30	26A	26F	1670	90.96%	32.99%	0.1014	71.92	-949.77	0.0000	0.0000	0.0183	0.0118	0.4851
146	37	30	26B	26F	1673	91.12%	32.93%	0.1050	71.31	-948.86	0.0000	0.0000	0.0520	0.0015	0.4089
147	37	30	26C	26F	1671	91.01%	32.91%	0.1124	71.33	-939.72	0.0000	0.0000	0.0836	0.0000	0.5474
148	37	30	26D	26F	1673	91.12%	32.93%	0.1054	70.89	-948.49	0.0000	0.0000	0.0334	0.0011	0.6804
149	37	30	26E	26F	1673	91.12%	32.93%	0.1045	70.83	-949.02	0.0000	0.0000	0.0334	0.0019	0.4328
150	37	30	26G	26F	1671	91.01%	32.91%	0.1047	71.28	-947.90	0.0000	0.0000	0.0524	0.0010	0.5751
151	37	31	26A	26F	1670	90.96%	32.99%	0.1012	71.32	-951.88	0.0000	0.0000	0.1823	0.0119	0.3167
152	37	31	26B	26F	1673	91.12%	32.93%	0.1040	71.31	-949.93	0.0000	0.0000	0.1823	0.0008	0.2902
153	37	31	26C	26F	1671	91.01%	32.91%	0.1111	71.57	-941.09	0.0000	0.0000	0.3952	0.0000	0.4058
154	37	31	26D	26F	1673	91.12%	32.88%	0.1092	70.71	-950.19	0.0000	0.0000	0.2029	0.0010	0.5168
155	37	31	26E	26F	1673	91.12%	32.93%	0.1028	71.67	-951.25	0.0000	0.0000	0.2944	0.0029	0.2715
156	37	31	26G	26F	1671	91.01%	32.91%	0.1040	71.45	-948.62	0.0000	0.0000	0.1782	0.0003	0.4222
157	37	36	26A	26F	1666	90.74%	33.01%	0.1010	71.43	-950.02	0.0000	0.0000	0.1937	0.0092	0.3109
158	37	36	26B	26F	1669	90.90%	32.95%	0.1041	71.48	-947.78	0.0000	0.0000	0.1188	0.0005	0.2781
159	37	36	28C	26F	1687	90.80%	32.93%	0.1123	71.69	-937.74	0.0000	0.0000	0.1433	0.0000	0.4375
160	37	36	28D	26F	1669	90.90%	32.95%	0.1040	71.06	-947.83	0.0000	0.0000	0.1413	0.0005	0.5382
161	37	36	26E	26F	1669	90.90%	32.95%	0.1028	71.60	-949.17	0.0000	0.0000	0.2128	0.0021	0.2828
162	37	36	28G	26F	1667	90.80%	32.93%	0.1043	71.63	-946.20	0.0000	0.0000	0.0796	0.0002	0.4329
MAX					1674	91.18%	33.35%	0.1124	73.05	-927.09	0.0028	0.6258	0.3952	0.0242	0.7838
MIN					1649	89.81%	32.87%	0.0794	69.84	-968.08	0.0000	0.0000	0.0004	0.0000	0.1417

Table C.2. Combinations of Avoidance, Modification, Substitution, and Replacement
Dependent Variable: Met Dietary Guideline or Not for Total Fat, 1995.

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET DIETARY GUIDELINES	MCFADDEN'S R2	% OF CORRECT PREDICTIONS	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
1	27	30	26A	26F	1800	92.98%	34.17%	0.0965	70.00	-1044.27	0.0000	0.0000	0.0000	0.0181	0.2075
2	27	30	26B	26F	1797	92.82%	34.22%	0.1063	69.78	-1031.83	0.0000	0.0000	0.0002	0.0000	0.2268
3	27	30	26C	26F	1796	92.77%	34.19%	0.1015	70.60	-1036.44	0.0000	0.0000	0.0001	0.0001	0.2961
4	27	30	26D	26F	1798	92.87%	34.09%	0.0971	89.52	-1041.69	0.0000	0.0000	0.0001	0.0101	0.2434
5	27	30	26E	26F	1800	92.98%	34.11%	0.0959	89.94	-1044.45	0.0000	0.0000	0.0001	0.0455	0.1820
6	27	30	26G	26F	1799	92.92%	34.07%	0.0947	69.98	-1044.77	0.0000	0.0000	0.0001	0.0672	0.4149
7	27	31	26A	26F	1800	92.98%	34.11%	0.0906	70.11	-1050.50	0.0000	0.0000	0.0228	0.0201	0.1848
8	27	31	26B	26F	1797	92.82%	34.17%	0.1013	70.12	-1037.09	0.0000	0.0000	0.0538	0.0000	0.1906
9	27	31	26C	26F	1796	92.77%	34.13%	0.0960	69.60	-1042.17	0.0000	0.0000	0.0317	0.0000	0.2767
10	27	31	26D	26F	1798	92.87%	34.04%	0.1178	70.13	-1046.92	0.0000	0.0000	0.0212	0.0031	0.2218
11	27	31	26E	26F	1800	92.98%	34.06%	0.0909	69.11	-1049.55	0.0000	0.0000	0.0152	0.0147	0.1704
12	27	31	26G	26F	1799	92.92%	34.02%	0.0898	69.82	-1050.05	0.0000	0.0000	0.0146	0.0384	0.3961
13	27	36	26A	26F	1789	92.41%	34.10%	0.0879	69.78	-1047.03	0.0000	0.0000	0.1147	0.0078	0.1283
14	27	36	26B	26F	1786	92.25%	34.15%	0.0992	70.33	-1032.95	0.0000	0.0000	0.0825	0.0000	0.1871
15	27	36	26C	26F	1785	92.20%	34.12%	0.0931	70.03	-1038.97	0.0000	0.0000	0.0990	0.0000	0.2096
16	27	36	26D	26F	1787	92.30%	34.02%	0.0890	69.50	-1043.79	0.0000	0.0000	0.1175	0.0021	0.1772
17	27	36	26E	26F	1789	92.41%	34.04%	0.0877	69.65	-1046.73	0.0000	0.0000	0.1139	0.0115	0.1231
18	27	36	26G	26F	1788	92.38%	34.00%	0.0887	69.41	-1046.88	0.0000	0.0000	0.1180	0.0214	0.3477
19	28	30	26A	26F	1798	92.87%	34.20%	0.0878	89.74	-1053.84	0.0000	0.0528	0.0000	0.0193	0.1530
20	28	30	26B	26F	1795	92.72%	34.28%	0.0991	68.91	-1039.39	0.0000	0.0884	0.0000	0.0000	0.1589
21	28	30	26C	26F	1795	92.72%	34.21%	0.0937	69.14	-1045.07	0.0000	0.0922	0.0000	0.0000	0.2198
22	28	30	26D	26F	1796	92.77%	34.13%	0.0893	69.60	-1049.92	0.0000	0.0841	0.0000	0.0049	0.1881
23	28	30	26E	26F	1798	92.87%	34.15%	0.0870	89.41	-1053.94	0.0000	0.0701	0.0000	0.0573	0.1181
24	28	30	26G	26F	1797	92.82%	34.11%	0.0860	70.17	-1054.11	0.0000	0.1018	0.0000	0.0720	0.3009
25	28	31	26A	26F	1798	92.87%	34.15%	0.0797	89.19	-1062.38	0.0000	0.0141	0.0120	0.0200	0.1151
26	28	31	26B	26F	1795	92.72%	34.21%	0.0921	69.64	-1048.88	0.0000	0.0319	0.0372	0.0000	0.1108
27	28	31	26C	26F	1795	92.72%	34.15%	0.0860	89.69	-1053.29	0.0000	0.0288	0.0230	0.0000	0.1752
28	28	31	26D	26F	1796	92.77%	34.08%	0.0823	88.85	-1057.32	0.0000	0.0274	0.0120	0.0010	0.1558
29	28	31	26E	26F	1798	92.87%	34.09%	0.0798	89.02	-1081.68	0.0000	0.0240	0.0089	0.0192	0.0945
30	28	31	26G	26F	1797	92.82%	34.08%	0.0787	88.89	-1081.92	0.0000	0.0393	0.0074	0.0398	0.2542
31	28	36	26A	26F	1787	92.30%	34.14%	0.0775	68.68	-1058.22	0.0000	0.0138	0.0942	0.0079	0.0871
32	28	36	26B	26F	1784	92.15%	34.19%	0.0908	69.40	-1042.00	0.0000	0.0307	0.0892	0.0000	0.1081
33	28	36	26C	26F	1784	92.15%	34.14%	0.0840	88.83	-1048.98	0.0000	0.0274	0.0798	0.0000	0.1498
34	28	36	26D	26F	1785	92.20%	34.08%	0.0799	89.52	-1053.51	0.0000	0.0000	0.1390	0.0110	0.0772
35	28	36	26E	26F	1787	92.30%	34.08%	0.0772	68.94	-1057.92	0.0000	0.0217	0.0898	0.0121	0.0738
36	28	36	26G	26F	1786	92.25%	34.04%	0.0763	68.09	-1058.04	0.0001	0.0385	0.0954	0.0219	0.2403
37	29	30	26A	26F	1799	92.92%	34.19%	0.0937	89.98	-1047.15	0.0000	0.0002	0.0000	0.0327	0.1463
38	29	30	26B	26F	1796	92.77%	34.24%	0.0824	70.10	-1032.46	0.0000	0.0002	0.0000	0.0000	0.1888
39	29	30	26C	26F	1795	92.72%	34.21%	0.1012	69.53	-1038.36	0.0000	0.0001	0.0000	0.0000	0.2542
40	29	30	26D	26F	1797	92.82%	34.11%	0.0950	89.73	-1043.66	0.0000	0.0005	0.0000	0.0064	0.1903
41	29	30	26E	26F	1799	92.92%	34.13%	0.0931	69.85	-1047.23	0.0000	0.0003	0.0000	0.0575	0.1225
42	29	30	26G	26F	1798	92.87%	34.09%	0.0923	89.58	-1047.26	0.0000	0.0005	0.0000	0.0814	0.2977
43	29	31	26A	26F	1799	92.92%	34.13%	0.0857	69.37	-1055.83	0.0000	0.0001	0.0128	0.0325	0.1002
44	29	31	26B	26F	1796	92.77%	34.19%	0.0988	70.05	-1039.59	0.0000	0.0001	0.0455	0.0000	0.1125
45	29	31	26C	26F	1795	92.72%	34.15%	0.0938	69.69	-1044.32	0.0000	0.0000	0.0342	0.0000	0.1919
46	29	31	26D	26F	1797	92.82%	34.08%	0.0882	69.67	-1050.92	0.0000	0.0002	0.0134	0.0013	0.1450
47	29	31	26E	26F	1799	92.92%	34.07%	0.0860	68.71	-1054.82	0.0000	0.0001	0.0108	0.0179	0.0915
48	29	31	26G	26F	1798	92.87%	34.04%	0.0851	69.30	-1054.94	0.0000	0.0002	0.0089	0.0420	0.2371
49	29	36	26A	26F	1788	92.36%	34.12%	0.0839	89.07	-1051.27	0.0000	0.0000	0.1470	0.0152	0.0801
50	29	36	26B	26F	1785	92.20%	34.17%	0.0978	70.25	-1034.21	0.0000	0.0000	0.1115	0.0000	0.1173
51	29	36	26C	26F	1784	92.15%	34.14%	0.0924	69.51	-1039.46	0.0000	0.0000	0.1385	0.0000	0.1722
52	29	36	26D	26F	1786	92.25%	34.04%	0.0862	89.49	-1048.83	0.0000	0.0001	0.1548	0.0009	0.1341
53	29	36	26E	26F	1788	92.38%	34.08%	0.0841	69.13	-1050.48	0.0000	0.0000	0.1390	0.0110	0.0772
54	29	36	26G	26F	1787	92.30%	34.02%	0.0831	89.22	-1050.82	0.0001	0.0001	0.1474	0.0280	0.2317
55	32	30	28A	26F	1799	92.92%	34.19%	0.0907	89.93	-1050.58	0.0000	0.0022	0.0000	0.0380	0.1710
56	32	30	26B	26F	1798	92.77%	34.24%	0.1018	89.71	-1036.98	0.0000	0.0071	0.0001	0.0000	0.1809
57	32	30	26C	26F	1795	92.72%	34.21%	0.0970	70.25	-1041.30	0.0000	0.0027	0.0000	0.0001	0.2437
58	32	30	26D	26F	1797	92.82%	34.11%	0.0921	70.28	-1047.01	0.0000	0.0041	0.0000	0.0088	0.2102
59	32	30	26E	26F	1799	92.92%	34.13%	0.0902	70.26	-1050.60	0.0000	0.0024	0.0000	0.0941	0.1414

DGUIDE

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET DIETARY GUIDELINES	MCFADDEN'S R2	% OF CORRECT PREDICTIONS	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
60	32	30	26G	26F	1798	92.87%	34.09%	0.0896	70.19	-1050.35	0.0000	0.0025	0.0000	0.0817	0.3544
61	32	31	26A	26F	1799	92.92%	34.13%	0.0838	69.76	-1057.90	0.0000	0.0002	0.0221	0.0371	0.1304
62	32	31	26B	26F	1796	92.77%	34.19%	0.0956	69.99	-1043.22	0.0000	0.0009	0.0839	0.0000	0.1240
63	32	31	26C	26F	1795	92.72%	34.15%	0.0905	69.30	-1048.20	0.0000	0.0003	0.0429	0.0000	0.1921
64	32	31	26D	26F	1797	92.82%	34.06%	0.0864	69.50	-1053.08	0.0000	0.0005	0.0215	0.0020	0.1714
65	32	31	26E	26F	1799	92.92%	34.07%	0.0842	69.87	-1058.97	0.0000	0.0003	0.0180	0.0331	0.1143
66	32	31	26G	26F	1798	92.87%	34.04%	0.0835	70.30	-1056.71	0.0000	0.0003	0.0188	0.0441	0.3083
67	32	36	26A	26F	1788	92.36%	34.12%	0.0810	69.41	-1054.59	0.0000	0.0004	0.1802	0.0177	0.1048
68	32	36	26B	26F	1785	92.20%	34.17%	0.0936	69.47	-1039.04	0.0000	0.0018	0.1250	0.0000	0.1274
69	32	36	26C	26F	1784	92.15%	34.14%	0.0878	69.62	-1044.68	0.0000	0.0005	0.1498	0.0000	0.1740
70	32	36	26D	26F	1788	92.25%	34.04%	0.0832	69.71	-1050.08	0.0000	0.0009	0.1882	0.0015	0.1557
71	32	36	26E	26F	1788	92.38%	34.06%	0.0810	69.58	-1054.00	0.0000	0.0005	0.1875	0.0235	0.0953
72	32	36	26G	26F	1787	92.30%	34.02%	0.0806	69.78	-1053.47	0.0000	0.0005	0.1825	0.0241	0.3052
73	33A	30	26A	26F	1799	92.92%	34.13%	0.0878	69.82	-1053.57	0.0000	0.0942	0.0000	0.0228	0.2435
74	33A	30	26B	26F	1796	92.77%	34.19%	0.0992	69.38	-1039.06	0.0000	0.1449	0.0000	0.0000	0.2474
75	33A	30	26C	26F	1795	92.72%	34.15%	0.0940	69.75	-1044.11	0.0000	0.0859	0.0000	0.0000	0.3457
76	33A	30	26D	26F	1797	92.82%	34.06%	0.0896	69.78	-1049.36	0.0000	0.1000	0.0000	0.0038	0.2908
77	33A	30	26E	26F	1799	92.92%	34.07%	0.0871	70.32	-1053.62	0.0000	0.0935	0.0000	0.0478	0.2071
78	33A	30	26G	26F	1798	92.87%	34.04%	0.0865	70.13	-1053.24	0.0000	0.1057	0.0000	0.0581	0.4513
79	33A	31	26A	26F	1799	92.92%	34.07%	0.0784	69.48	-1063.60	0.0000	0.0872	0.0148	0.0190	0.1791
80	33A	31	26B	26F	1796	92.77%	34.13%	0.0911	69.54	-1047.87	0.0000	0.1422	0.0441	0.0000	0.1572
81	33A	31	26C	26F	1795	92.72%	34.09%	0.0853	69.19	-1053.59	0.0000	0.0880	0.0309	0.0000	0.2848
82	33A	31	26D	26F	1797	92.82%	34.00%	0.0818	69.51	-1057.99	0.0000	0.0825	0.0181	0.0006	0.2290
83	33A	31	26E	26F	1799	92.92%	34.02%	0.0788	69.04	-1062.52	0.0000	0.0749	0.0103	0.0118	0.1580
84	33A	31	26G	26F	1798	92.87%	33.98%	0.0783	69.08	-1062.18	0.0000	0.0922	0.0104	0.0240	0.3785
85	33A	36	26A	26F	1788	92.36%	34.06%	0.0772	68.29	-1058.35	0.0001	0.0289	0.0830	0.0093	0.1535
86	33A	36	26B	26F	1785	92.20%	34.12%	0.0905	68.91	-1041.96	0.0000	0.0814	0.0570	0.0000	0.1794
87	33A	36	26C	26F	1784	92.15%	34.08%	0.0842	69.23	-1048.17	0.0000	0.0284	0.0874	0.0000	0.2598
88	33A	36	26D	26F	1786	92.25%	33.99%	0.0801	69.21	-1053.07	0.0000	0.0332	0.0872	0.0005	0.2248
89	33A	36	26E	26F	1788	92.36%	34.00%	0.0772	69.13	-1057.69	0.0001	0.0288	0.0718	0.0090	0.1443
90	33A	36	26G	26F	1787	92.30%	33.97%	0.0768	69.56	-1057.18	0.0001	0.0381	0.0855	0.0183	0.3884
91	33B	30	26A	26F	1784	92.15%	34.02%	0.0870	69.73	-1044.43	0.0000	0.1525	0.0000	0.0209	0.1789
92	33B	30	26B	26F	1781	91.99%	34.08%	0.0983	69.01	-1030.35	0.0000	0.2525	0.0000	0.0000	0.1512
93	33B	30	26C	26F	1780	91.94%	34.04%	0.0933	69.33	-1035.03	0.0000	0.1129	0.0000	0.0000	0.2434
94	33B	30	26D	26F	1782	92.05%	33.95%	0.0888	69.42	-1040.39	0.0000	0.1730	0.0000	0.0035	0.2159
95	33B	30	26E	26F	1784	92.15%	33.97%	0.0865	69.84	-1044.38	0.0000	0.1515	0.0000	0.0437	0.1375
96	33B	30	26G	26F	1783	92.10%	33.93%	0.0851	69.83	-1045.02	0.0000	0.1970	0.0000	0.1112	0.2987
97	33B	31	26A	26F	1784	92.15%	33.97%	0.0793	69.08	-1052.62	0.0000	0.0787	0.0068	0.0222	0.1353
98	33B	31	26B	26F	1781	91.99%	34.03%	0.0917	69.68	-1037.32	0.0000	0.1580	0.0208	0.0000	0.1023
99	33B	31	26C	26F	1780	91.94%	33.99%	0.0862	69.38	-1042.80	0.0000	0.0580	0.0121	0.0000	0.1945
100	33B	31	26D	26F	1782	92.05%	33.89%	0.0824	69.14	-1047.09	0.0000	0.0842	0.0075	0.0007	0.1817
101	33B	31	26E	26F	1784	92.15%	33.91%	0.0798	69.11	-1051.38	0.0000	0.0828	0.0048	0.0127	0.1112
102	33B	31	26G	26F	1783	92.10%	33.88%	0.0782	69.04	-1052.19	0.0001	0.1149	0.0041	0.0845	0.2493
103	33B	36	26A	26F	1773	91.58%	33.95%	0.0771	68.25	-1048.44	0.0001	0.0549	0.0852	0.0096	0.1185
104	33B	36	26B	26F	1770	91.43%	34.01%	0.0901	68.47	-1032.48	0.0000	0.1235	0.0455	0.0000	0.1189
105	33B	36	26C	26F	1769	91.37%	33.97%	0.0842	68.80	-1038.24	0.0000	0.0380	0.0488	0.0000	0.1889
106	33B	36	26D	26F	1771	91.48%	33.88%	0.0801	69.00	-1043.07	0.0000	0.0838	0.0870	0.0004	0.1794
107	33B	36	26E	26F	1773	91.58%	33.90%	0.0773	68.53	-1047.56	0.0001	0.0550	0.0538	0.0084	0.1008
108	33B	36	26G	26F	1772	91.53%	33.88%	0.0758	69.24	-1048.33	0.0004	0.0843	0.0832	0.0408	0.2557
109	34	30	26A	26F	1798	92.87%	34.15%	0.0888	70.19	-1051.87	0.0000	0.0318	0.0000	0.0327	0.1284
110	34	30	26B	26F	1795	92.72%	34.21%	0.1003	69.42	-1037.49	0.0000	0.0682	0.0001	0.0000	0.1355
111	34	30	26C	26F	1794	92.67%	34.17%	0.0949	70.40	-1042.69	0.0000	0.0488	0.0000	0.0001	0.1854
112	34	30	26D	26F	1796	92.77%	34.08%	0.0902	69.88	-1048.29	0.0000	0.0841	0.0000	0.0077	0.1545
113	34	30	26E	26F	1798	92.87%	34.09%	0.0884	70.19	-1051.72	0.0000	0.0314	0.0000	0.0829	0.1018
114	34	30	26G	26F	1797	92.82%	34.06%	0.0863	69.95	-1053.13	0.0000	0.1541	0.0000	0.2398	0.2102
115	34	31	26A	26F	1798	92.87%	34.09%	0.0822	69.19	-1058.90	0.0000	0.0028	0.0125	0.0373	0.0946
116	34	31	26B	26F	1795	92.72%	34.15%	0.0948	69.47	-1043.45	0.0000	0.0099	0.0384	0.0000	0.0965
117	34	31	26C	26F	1794	92.87%	34.11%	0.0888	70.29	-1049.33	0.0000	0.0047	0.0245	0.0000	0.1453
118	34	31	26D	26F	1796	92.77%	34.02%	0.0846	69.88	-1054.16	0.0000	0.0083	0.0113	0.0021	0.1268

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET DIETARY GUIDELINES	MCFADDEN'S R2	% OF CORRECT PREDICTIONS	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
119	34	31	26E	26F	1796	92.87%	34.04%	0.0826	69.19	-1057.58	0.0000	0.0029	0.0083	0.0218	0.0824
120	34	31	26G	26F	1797	92.82%	34.00%	0.0799	69.26	-1059.88	0.0000	0.0346	0.0066	0.2500	0.1600
121	34	36	26A	26F	1786	92.36%	34.06%	0.0802	68.79	-1054.87	0.0000	0.0014	0.1092	0.0177	0.0766
122	34	36	26B	26F	1785	92.20%	34.12%	0.0927	69.52	-1039.41	0.0000	0.0078	0.1010	0.0000	0.0929
123	34	36	26C	26F	1784	92.15%	34.06%	0.0867	69.68	-1045.37	0.0000	0.0034	0.1113	0.0000	0.1278
124	34	36	26D	26F	1786	92.25%	33.99%	0.0822	69.36	-1050.63	0.0000	0.0050	0.1115	0.0019	0.1129
125	34	36	26E	26F	1786	92.36%	34.00%	0.0802	68.62	-1054.24	0.0000	0.0019	0.1205	0.0203	0.0875
126	34	36	26G	26F	1787	92.30%	33.97%	0.0777	69.22	-1058.15	0.0000	0.0200	0.0930	0.1685	0.1587
127	35	30	26A	26F	1781	91.99%	33.91%	0.0847	70.24	-1044.03	0.0000	0.0385	0.0000	0.0206	0.1749
128	35	30	26B	26F	1778	91.84%	33.97%	0.0970	69.91	-1026.67	0.0000	0.0451	0.0001	0.0000	0.1854
129	35	30	26C	26F	1777	91.79%	33.93%	0.0906	69.78	-1035.18	0.0000	0.0453	0.0000	0.0000	0.2330
130	35	30	26D	26F	1779	91.89%	33.84%	0.0855	69.62	-1041.15	0.0000	0.0511	0.0000	0.0088	0.2028
131	35	30	26E	26F	1781	91.99%	33.66%	0.0842	69.40	-1044.05	0.0000	0.0324	0.0000	0.0463	0.1510
132	35	30	26G	26F	1780	91.94%	33.62%	0.0826	69.76	-1044.64	0.0000	0.0655	0.0000	0.0979	0.3184
133	35	31	26A	26F	1781	91.99%	33.66%	0.0793	68.76	-1049.62	0.0000	0.0025	0.0045	0.0227	0.1403
134	35	31	26B	26F	1778	91.84%	33.91%	0.0925	69.74	-1033.42	0.0000	0.0041	0.0149	0.0000	0.1383
135	35	31	26C	26F	1777	91.79%	33.86%	0.0854	68.82	-1040.52	0.0000	0.0038	0.0093	0.0000	0.1906
136	35	31	26D	26F	1779	91.89%	33.76%	0.0809	68.75	-1045.81	0.0000	0.0040	0.0042	0.0028	0.1892
137	35	31	26E	26F	1781	91.99%	33.60%	0.0797	69.46	-1046.46	0.0000	0.0022	0.0031	0.0148	0.1306
138	35	31	26G	26F	1780	91.94%	33.76%	0.0776	69.33	-1049.67	0.0000	0.0073	0.0028	0.0977	0.2625
139	35	36	26A	26F	1770	91.43%	33.64%	0.0774	68.36	-1045.08	0.0000	0.0011	0.0342	0.0106	0.1067
140	35	36	26B	26F	1767	91.27%	33.90%	0.0907	68.53	-1026.65	0.0000	0.0033	0.0429	0.0000	0.1270
141	35	36	26C	26F	1766	91.22%	33.66%	0.0833	66.97	-1036.25	0.0000	0.0025	0.0440	0.0000	0.1574
142	35	36	26D	26F	1766	91.32%	33.77%	0.0767	68.95	-1041.64	0.0000	0.0022	0.0345	0.0022	0.1452
143	35	36	26E	26F	1770	91.43%	33.79%	0.0771	68.67	-1044.82	0.0000	0.0013	0.0458	0.0187	0.1018
144	35	36	26G	26F	1769	91.37%	33.75%	0.0757	69.19	-1045.43	0.0000	0.0033	0.0298	0.0522	0.2487
145	37	30	26A	26F	1799	92.92%	34.13%	0.0980	70.21	-1041.59	0.0000	0.0000	0.0000	0.0398	0.1508
146	37	30	26B	26F	1796	92.77%	34.19%	0.1062	70.32	-1026.71	0.0000	0.0000	0.0000	0.0000	0.1575
147	37	30	26C	26F	1795	92.72%	34.15%	0.1024	69.61	-1034.48	0.0000	0.0000	0.0000	0.0004	0.2101
148	37	30	26D	26F	1797	92.82%	34.06%	0.0995	69.84	-1037.93	0.0000	0.0000	0.0000	0.0092	0.1954
149	37	30	26E	26F	1799	92.92%	34.07%	0.0967	70.21	-1042.55	0.0000	0.0000	0.0000	0.1926	0.1154
150	37	30	26G	26F	1796	92.67%	34.04%	0.0971	70.02	-1041.04	0.0000	0.0000	0.0000	0.0668	0.3275
151	37	31	26A	26F	1799	92.92%	34.07%	0.0908	70.21	-1049.28	0.0000	0.0000	0.0143	0.0415	0.1138
152	37	31	26B	26F	1796	92.77%	34.13%	0.1020	69.27	-1035.32	0.0000	0.0000	0.0414	0.0000	0.1067
153	37	31	26C	26F	1795	92.72%	34.09%	0.0954	70.25	-1041.96	0.0000	0.0000	0.0244	0.0001	0.1598
154	37	31	26D	26F	1797	92.82%	34.00%	0.0935	70.01	-1044.23	0.0000	0.0000	0.0158	0.0020	0.1612
155	37	31	26E	26F	1799	92.92%	34.02%	0.0902	70.32	-1049.44	0.0000	0.0000	0.0097	0.0802	0.0898
156	37	31	26G	26F	1796	92.87%	33.98%	0.0909	70.30	-1047.64	0.0000	0.0000	0.0111	0.0338	0.2789
157	37	36	26A	26F	1786	92.36%	34.06%	0.0867	70.25	-1045.12	0.0000	0.0000	0.0800	0.0189	0.0908
158	37	36	26B	26F	1785	92.20%	34.12%	0.1006	69.58	-1030.42	0.0000	0.0000	0.0574	0.0000	0.1068
159	37	36	26C	26F	1784	92.15%	34.06%	0.0935	69.90	-1037.52	0.0000	0.0000	0.0592	0.0001	0.1432
160	37	36	26D	26F	1788	92.25%	33.99%	0.0911	69.77	-1040.46	0.0000	0.0000	0.0931	0.0018	0.1441
161	37	36	26E	26F	1788	92.36%	34.00%	0.0877	69.97	-1045.69	0.0000	0.0000	0.0713	0.0599	0.0735
162	37	36	26G	26F	1787	92.30%	33.97%	0.0866	70.57	-1043.64	0.0000	0.0000	0.0917	0.0198	0.2719
MAX					1800	92.98%	34.26%	0.1176	70.60	-1028.71	0.0004	0.2525	0.1882	0.2500	0.4513
MIN					1766	91.22%	33.75%	0.0757	68.09	-1063.60	0.0000	0.0000	0.0000	0.0000	0.0875

Table C.3. Combinations of Avoidance, Modification, Substitution, and Replacement.
Dependent Variable: Met Dietary Guideline or Not for Total Fat, 1996.

COMBINATION	A?	M?	S?	R?	N	% OF USEAB SERVATIO	% WHO ME RY GUIDE	CFADDEN' R2	OF CORRECT REDICTION	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
1	27	30	26A	26F	1730	92.17%	36.18%	0.0803	68.44	-1041.35	0.0000	0.1155	0.0012	0.0191	0.0188
2	27	30	26B	26F	1731	92.22%	36.11%	0.0852	69.21	-1035.72	0.0000	0.2937	0.0071	0.0002	0.0080
3	27	30	26C	26F	1731	92.22%	36.11%	0.0837	68.63	-1037.40	0.0000	0.2466	0.0038	0.0015	0.0130
4	27	30	26D	26F	1730	92.17%	36.13%	0.0857	67.80	-1034.68	0.0000	0.1912	0.0047	0.0004	0.0225
5	27	30	26E	26F	1726	91.96%	36.10%	0.0841	67.73	-1033.80	0.0000	0.1300	0.0062	0.0010	0.0377
6	27	30	26G	26F	1730	92.17%	36.18%	0.0777	68.09	-1044.31	0.0000	0.0860	0.0011	0.2856	0.0235
7	27	31	26A	26F	1731	92.22%	36.16%	0.0783	68.86	-1044.00	0.0000	0.0390	0.0111	0.0425	0.0142
8	27	31	26B	26F	1732	92.27%	36.09%	0.0843	68.19	-1037.06	0.0000	0.1576	0.0185	0.0001	0.0067
9	27	31	26C	26F	1732	92.27%	36.09%	0.0821	68.13	-1039.63	0.0000	0.1235	0.0223	0.0020	0.0101
10	27	31	26D	26F	1731	92.22%	36.11%	0.0582	68.11	-1035.70	0.0000	0.1051	0.0093	0.0001	0.0208
11	27	31	26E	26F	1727	92.01%	36.07%	0.0834	68.21	-1035.06	0.0000	0.0584	0.0150	0.0010	0.0337
12	27	31	26G	26F	1731	92.22%	36.16%	0.0765	67.65	-1046.01	0.0000	0.0307	0.0044	0.3736	0.0225
13	27	36	26A	26F	1710	91.10%	36.20%	0.0755	67.60	-1034.83	0.0000	0.0339	0.1321	0.0133	0.0092
14	27	36	26B	26F	1711	91.16%	36.12%	0.0818	68.03	-1027.57	0.0000	0.1384	0.1720	0.0000	0.0035
15	27	36	26C	26F	1711	91.16%	36.12%	0.0798	67.80	-1029.86	0.0000	0.1127	0.1668	0.0003	0.0061
16	27	36	26D	26F	1710	91.10%	36.14%	0.0829	67.90	-1025.94	0.0000	0.0935	0.1050	0.0000	0.0133
17	27	36	26E	26F	1707	90.94%	36.09%	0.0807	67.84	-1026.16	0.0000	0.0527	0.1541	0.0002	0.0197
18	27	36	26G	26F	1711	91.16%	36.18%	0.0727	67.56	-1038.30	0.0001	0.0287	0.0956	0.2668	0.0149
19	28	30	26A	26F	1730	92.17%	36.18%	0.0877	69.71	-1033.00	0.0000	0.0001	0.0036	0.0232	0.0178
20	28	30	26B	26F	1731	92.22%	36.11%	0.0920	68.46	-1028.01	0.0000	0.0003	0.0158	0.0005	0.0080
21	28	30	26C	26F	1731	92.22%	36.11%	0.0905	69.15	-1029.65	0.0000	0.0002	0.0091	0.0029	0.0124
22	28	30	26D	26F	1730	92.17%	36.13%	0.0925	69.02	-1026.96	0.0000	0.0002	0.0118	0.0008	0.0212
23	28	30	26E	26F	1726	91.96%	36.10%	0.0909	69.58	-1026.13	0.0000	0.0001	0.0128	0.0023	0.0320
24	28	30	26G	26F	1730	92.17%	36.18%	0.0851	68.61	-1035.88	0.0000	0.0000	0.0032	0.2873	0.0209
25	28	31	26A	26F	1731	92.22%	36.16%	0.0862	68.98	-1035.08	0.0000	0.0000	0.0175	0.0498	0.0135
26	28	31	26B	26F	1732	92.27%	36.09%	0.0915	68.59	-1028.97	0.0000	0.0001	0.0260	0.0002	0.0069
27	28	31	26C	26F	1732	92.27%	36.09%	0.0894	68.13	-1031.37	0.0000	0.0001	0.0299	0.0039	0.0101
28	28	31	26D	26F	1731	92.22%	36.11%	0.0924	69.15	-1027.54	0.0000	0.0001	0.0141	0.0003	0.0199
29	28	31	26E	26F	1727	92.01%	36.07%	0.0904	69.19	-1027.06	0.0000	0.0000	0.0201	0.0024	0.0294
30	28	31	26G	26F	1731	92.22%	36.16%	0.0844	69.09	-1037.09	0.0000	0.0000	0.0073	0.3530	0.0199
31	28	36	26A	26F	1710	91.10%	36.20%	0.0829	68.42	-1028.52	0.0000	0.0000	0.2468	0.0137	0.0090
32	28	36	26B	26F	1711	91.16%	36.12%	0.0884	68.79	-1020.21	0.0000	0.0002	0.2785	0.0001	0.0037
33	28	36	26C	26F	1711	91.16%	36.12%	0.0865	68.09	-1022.34	0.0000	0.0001	0.2828	0.0007	0.0063
34	28	36	26D	26F	1710	91.10%	36.14%	0.0895	68.71	-1018.64	0.0000	0.0001	0.1977	0.0001	0.0131
35	28	36	26E	26F	1707	90.94%	36.09%	0.0873	68.89	-1018.82	0.0000	0.0001	0.2556	0.0005	0.0179
36	28	36	26G	26F	1711	91.16%	36.18%	0.0801	67.97	-1030.04	0.0000	0.0000	0.1936	0.2655	0.0136
37	29	30	26A	26F	1730	92.17%	36.18%	0.0839	68.09	-1037.19	0.0000	0.0044	0.0011	0.0172	0.0151
38	29	30	26B	26F	1731	92.22%	36.11%	0.0894	68.17	-1030.97	0.0000	0.0065	0.0072	0.0001	0.0072
39	29	30	26C	26F	1731	92.22%	36.11%	0.0877	67.94	-1032.82	0.0000	0.0067	0.0044	0.0008	0.0107
40	29	30	26D	26F	1730	92.17%	36.13%	0.0898	68.09	-1030.08	0.0000	0.0050	0.0055	0.0001	0.0204
41	29	30	26E	26F	1726	91.96%	36.10%	0.0875	68.54	-1029.93	0.0000	0.0065	0.0053	0.0008	0.0327
42	29	30	26G	26F	1730	92.17%	36.18%	0.0808	67.17	-1040.79	0.0000	0.0058	0.0009	0.3700	0.0168
43	29	31	26A	26F	1731	92.22%	36.16%	0.0815	68.46	-1040.42	0.0000	0.0028	0.0168	0.0371	0.0092
44	29	31	26B	26F	1732	92.27%	36.09%	0.0882	67.81	-1032.69	0.0000	0.0048	0.0275	0.0000	0.0050
45	29	31	26C	26F	1732	92.27%	36.09%	0.0859	67.84	-1035.33	0.0000	0.0043	0.0341	0.0008	0.0070
46	29	31	26D	26F	1731	92.22%	36.11%	0.0890	67.65	-1031.32	0.0000	0.0033	0.0138	0.0000	0.0165
47	29	31	26E	26F	1727	92.01%	36.07%	0.0863	68.87	-1031.73	0.0000	0.0048	0.0211	0.0005	0.0249
48	29	31	26G	28F	1731	92.22%	36.16%	0.0791	68.75	-1043.07	0.0000	0.0038	0.0063	0.4551	0.0132
49	29	36	26A	26F	1710	91.10%	36.20%	0.0786	67.60	-1031.35	0.0000	0.0024	0.1892	0.0120	0.0084
50	29	36	26B	26F	1711	91.16%	36.12%	0.0857	68.32	-1023.24	0.0000	0.0043	0.2185	0.0000	0.0030

DGUIDE

COMBINATION	A?	M?	S?	R?	N	% OF USEABL SERVATIO	% WHO MET RY GUIDEL	CFADDEN' R2	OF CORRECT REDICTION	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
51	29	36	26C	26F	1711	91.16%	36.12%	0.0836	67.55	-1025.63	0.0000	0.0041	0.2311	0.0001	0.0047
52	29	36	26D	26F	1710	91.10%	36.14%	0.0867	67.78	-1021.70	0.0000	0.0033	0.1528	0.0000	0.0114
53	29	36	26E	26F	1707	90.94%	36.09%	0.0836	68.25	-1022.85	0.0000	0.0043	0.2148	0.0001	0.0159
54	29	36	26G	26F	1711	91.16%	36.18%	0.0754	67.80	-1035.34	0.0000	0.0030	0.1391	0.3453	0.0091
55	32	30	26A	26F	1729	92.12%	36.21%	0.0919	68.60	-1027.81	0.0000	0.0000	0.0038	0.0425	0.0287
56	32	30	26B	26F	1730	92.17%	36.13%	0.0959	68.90	-1023.18	0.0000	0.0000	0.0198	0.0008	0.0160
57	32	30	26C	26F	1730	92.17%	36.13%	0.0952	68.15	-1023.95	0.0000	0.0000	0.0131	0.0041	0.0214
58	32	30	26D	26F	1729	92.12%	36.15%	0.0970	68.77	-1021.49	0.0000	0.0000	0.0136	0.0013	0.0323
59	32	30	26E	26F	1725	91.90%	36.12%	0.0951	69.16	-1021.04	0.0000	0.0000	0.0146	0.0032	0.0509
60	32	30	26G	26F	1729	92.12%	36.21%	0.0892	68.48	-1030.79	0.0000	0.0000	0.0037	0.5009	0.0342
61	32	31	26A	26F	1730	92.17%	36.18%	0.0895	69.02	-1030.86	0.0000	0.0000	0.0502	0.0727	0.0201
62	32	31	26B	26F	1731	92.22%	36.11%	0.0947	69.21	-1024.91	0.0000	0.0000	0.0736	0.0003	0.0120
63	32	31	26C	26F	1731	92.22%	36.11%	0.0935	68.52	-1026.32	0.0000	0.0000	0.0889	0.0034	0.0155
64	32	31	26D	26F	1730	92.17%	36.13%	0.0960	68.67	-1023.04	0.0000	0.0000	0.0440	0.0004	0.0268
65	32	31	26E	26F	1726	91.96%	36.10%	0.0937	69.41	-1022.95	0.0000	0.0000	0.0633	0.0028	0.0418
66	32	31	26G	26F	1730	92.17%	36.18%	0.0876	68.79	-1033.11	0.0000	0.0000	0.0253	0.5938	0.0292
67	32	36	26A	26F	1709	91.05%	36.22%	0.0881	68.05	-1020.30	0.0000	0.0000	0.3550	0.0309	0.0147
68	32	36	26B	26F	1710	91.10%	36.14%	0.0934	68.13	-1014.19	0.0000	0.0000	0.4056	0.0001	0.0071
69	32	36	26C	26F	1710	91.10%	36.14%	0.0924	67.95	-1015.39	0.0000	0.0000	0.4185	0.0009	0.0108
70	32	36	26D	26F	1709	91.05%	36.16%	0.0951	68.99	-1011.96	0.0000	0.0000	0.3115	0.0001	0.0189
71	32	36	26E	26F	1706	90.89%	36.11%	0.0926	68.52	-1012.48	0.0000	0.0000	0.3684	0.0008	0.0273
72	32	36	26G	26F	1710	91.10%	36.20%	0.0854	68.77	-1023.72	0.0000	0.0000	0.2955	0.4847	0.0217
73	33A	30	26A	26F	1730	92.17%	36.18%	0.0811	67.69	-1040.37	0.0000	0.0503	0.0004	0.0114	0.0208
74	33A	30	26B	26F	1731	92.22%	36.11%	0.0868	68.28	-1033.82	0.0000	0.0585	0.0040	0.0001	0.0099
75	33A	30	26C	26F	1731	92.22%	36.11%	0.0856	67.94	-1035.25	0.0000	0.0391	0.0023	0.0003	0.0160
76	33A	30	26D	26F	1730	92.17%	36.13%	0.0875	68.21	-1032.66	0.0000	0.0333	0.0025	0.0000	0.0263
77	33A	30	26E	26F	1726	91.96%	36.10%	0.0852	67.56	-1032.61	0.0000	0.0477	0.0029	0.0004	0.0451
78	33A	30	26G	26F	1730	92.17%	36.18%	0.0781	67.11	-1043.83	0.0000	0.0584	0.0004	0.2546	0.0248
79	33A	31	26A	26F	1731	92.22%	38.16%	0.0785	68.11	-1043.72	0.0000	0.0319	0.0074	0.0282	0.0135
80	33A	31	26B	26F	1732	92.27%	36.09%	0.0857	87.78	-1035.46	0.0000	0.0403	0.0140	0.0000	0.0074
81	33A	31	26C	26F	1732	92.27%	36.09%	0.0837	67.72	-1037.74	0.0000	0.0241	0.0181	0.0003	0.0116
82	33A	31	26D	26F	1731	92.22%	36.11%	0.0867	67.36	-1033.91	0.0000	0.0221	0.0062	0.0000	0.0226
83	33A	31	26E	26F	1727	92.01%	36.07%	0.0840	68.21	-1034.34	0.0000	0.0323	0.0108	0.0003	0.0377
84	33A	31	26G	26F	1731	92.22%	36.16%	0.0764	87.65	-1046.17	0.0000	0.0372	0.0028	0.3437	0.0213
85	33A	36	26A	26F	1710	91.10%	36.20%	0.0757	67.95	-1034.61	0.0000	0.0291	0.1142	0.0088	0.0088
86	33A	36	26B	26F	1711	91.16%	36.12%	0.0834	67.50	-1025.88	0.0000	0.0321	0.1481	0.0000	0.0041
87	33A	36	26C	26F	1711	91.16%	36.12%	0.0816	67.21	-1027.81	0.0000	0.0187	0.1519	0.0000	0.0075
88	33A	36	26D	26F	1710	91.10%	36.14%	0.0847	67.90	-1023.97	0.0000	0.0164	0.0848	0.0000	0.0155
89	33A	36	26E	26F	1707	90.94%	36.09%	0.0814	67.90	-1025.37	0.0000	0.0271	0.1381	0.0001	0.0228
90	33A	36	26G	26F	1711	91.16%	36.18%	0.0726	66.75	-1038.46	0.0001	0.0322	0.0781	0.2447	0.0143
91	33B	30	26A	26F	1719	91.58%	35.95%	0.0790	68.70	-1034.06	0.0000	0.1159	0.0009	0.0159	0.0161
92	33B	30	26B	26F	1720	91.64%	35.87%	0.0841	68.78	-1028.16	0.0000	0.2473	0.0065	0.0001	0.0070
93	33B	30	26C	26F	1720	91.64%	35.87%	0.0829	67.62	-1029.59	0.0000	0.2045	0.0038	0.0007	0.0119
94	33B	30	26D	26F	1719	91.58%	35.89%	0.0845	68.24	-1027.38	0.0000	0.1952	0.0047	0.0003	0.0213
95	33B	30	26E	26F	1715	91.37%	35.86%	0.0824	68.28	-1026.99	0.0000	0.2719	0.0044	0.0009	0.0289
96	33B	30	26G	26F	1719	91.58%	35.95%	0.0762	67.07	-1037.15	0.0000	0.1408	0.0008	0.2483	0.0186
97	33B	31	26A	26F	1720	91.64%	35.93%	0.0783	68.08	-1037.48	0.0000	0.0804	0.0181	0.0381	0.0099
98	33B	31	26B	26F	1721	91.69%	35.85%	0.0829	87.40	-1029.91	0.0000	0.2004	0.0241	0.0001	0.0050
99	33B	31	26C	26F	1721	91.69%	35.85%	0.0808	67.93	-1032.25	0.0000	0.1542	0.0324	0.0007	0.0060
100	33B	31	26D	26F	1720	91.64%	35.87%	0.0835	68.20	-1028.83	0.0000	0.1622	0.0135	0.0001	0.0174

COMBINATION	A?	M?	S?	R?	N	% OF USEABLE OBSERVATIONS	% WHO MET ARY GUIDEL	MCFADDEN'S R2	% OF CORRECT PREDICTION	LLF	AMSR X2-PVALUE	A GROUP X2-PVALUE	M GROUP X2-PVALUE	S GROUP X2-PVALUE	R GROUP X2-PVALUE
101	33B	31	26E	26F	1716	91.42%	35.84%	0.0811	68.53	-1028.87	0.0000	0.2218	0.0183	0.0008	0.0226
102	33B	31	26G	26F	1720	91.64%	35.93%	0.0745	68.08	-1039.54	0.0000	0.0978	0.0060	0.2991	0.0153
103	33B	36	26A	26F	1699	90.52%	35.96%	0.0743	67.63	-1027.37	0.0000	0.0358	0.1461	0.0115	0.0079
104	33B	36	26B	26F	1700	90.57%	35.88%	0.0811	68.35	-1019.71	0.0000	0.1105	0.1877	0.0000	0.0032
105	33B	36	26C	26F	1700	90.57%	35.88%	0.0794	67.24	-1021.59	0.0000	0.0786	0.1904	0.0001	0.0060
106	33B	36	26D	26F	1699	90.52%	35.90%	0.0821	68.04	-1018.11	0.0000	0.0815	0.1183	0.0000	0.0135
107	33B	36	26E	26F	1696	90.36%	35.85%	0.0791	68.40	-1019.18	0.0000	0.1251	0.1602	0.0002	0.0151
108	33B	36	26G	26F	1700	90.57%	35.94%	0.0714	66.24	-1030.93	0.0001	0.0466	0.1094	0.2331	0.0117
109	34	30	26A	26F	1729	92.12%	36.15%	0.0804	68.19	-1040.23	0.0000	0.1009	0.0029	0.0187	0.0065
110	34	30	26B	26F	1730	92.17%	36.07%	0.0857	68.15	-1034.22	0.0000	0.1631	0.0167	0.0001	0.0041
111	34	30	26C	26F	1730	92.17%	36.07%	0.0841	67.92	-1035.97	0.0000	0.1591	0.0092	0.0012	0.0065
112	34	30	26D	26F	1729	92.12%	36.09%	0.0860	68.02	-1033.47	0.0000	0.1377	0.0109	0.0004	0.0118
113	34	30	26E	26F	1725	91.90%	36.06%	0.0840	68.12	-1033.05	0.0000	0.1481	0.0127	0.0012	0.0192
114	34	30	26G	26F	1729	92.12%	36.15%	0.0778	67.15	-1043.23	0.0000	0.0686	0.0022	0.2997	0.0084
115	34	31	26A	26F	1730	92.17%	36.13%	0.0790	68.67	-1042.28	0.0000	0.0200	0.0158	0.0453	0.0057
116	34	31	26B	26F	1731	92.22%	36.05%	0.0854	68.52	-1034.97	0.0000	0.0529	0.0259	0.0001	0.0032
117	34	31	26C	26F	1731	92.22%	36.05%	0.0831	67.82	-1037.49	0.0000	0.0422	0.0290	0.0018	0.0047
118	34	31	26D	26F	1730	92.17%	36.07%	0.0859	68.04	-1033.90	0.0000	0.0458	0.0128	0.0002	0.0099
119	34	31	26E	26F	1726	91.96%	36.04%	0.0837	68.08	-1033.79	0.0000	0.0439	0.0193	0.0014	0.0161
120	34	31	26G	26F	1730	92.17%	36.13%	0.0772	68.21	-1044.36	0.0000	0.0151	0.0053	0.4350	0.0048
121	34	36	26A	26F	1709	91.05%	36.16%	0.0761	68.23	-1033.23	0.0000	0.0193	0.1564	0.0165	0.0036
122	34	36	26B	26F	1710	91.10%	36.08%	0.0829	67.72	-1025.46	0.0000	0.0454	0.1979	0.0000	0.0016
123	34	36	26C	26F	1710	91.10%	36.08%	0.0809	67.54	-1027.72	0.0000	0.0400	0.1887	0.0003	0.0028
124	34	36	26D	26F	1709	91.05%	36.10%	0.0838	67.93	-1023.99	0.0000	0.0366	0.1154	0.0000	0.0084
125	34	36	26E	26F	1706	90.89%	36.05%	0.0811	67.41	-1024.82	0.0000	0.0368	0.1732	0.0003	0.0092
126	34	36	26G	26F	1710	91.10%	36.14%	0.0733	67.49	-1036.73	0.0001	0.0140	0.0995	0.4072	0.0030
127	35	30	26A	26F	1722	91.74%	36.00%	0.0791	68.76	-1036.21	0.0000	0.1441	0.0030	0.0191	0.0098
128	35	30	26B	26F	1723	91.80%	35.93%	0.0844	68.37	-1030.20	0.0000	0.2128	0.0171	0.0001	0.0045
129	35	30	26C	26F	1723	91.80%	35.93%	0.0829	68.08	-1031.78	0.0000	0.2428	0.0107	0.0010	0.0071
130	35	30	26D	26F	1722	91.74%	35.95%	0.0845	68.06	-1029.84	0.0000	0.2133	0.0113	0.0004	0.0134
131	35	30	26E	26F	1718	91.53%	35.91%	0.0832	68.45	-1028.42	0.0000	0.2052	0.0149	0.0006	0.0219
132	35	30	26G	26F	1722	91.74%	36.00%	0.0766	67.19	-1039.04	0.0000	0.1396	0.0024	0.2504	0.0093
133	35	31	26A	26F	1723	91.80%	35.98%	0.0776	68.25	-1038.30	0.0000	0.0503	0.0173	0.0418	0.0061
134	35	31	26B	26F	1724	91.85%	35.90%	0.0839	68.68	-1031.02	0.0000	0.0951	0.0289	0.0001	0.0033
135	35	31	26C	26F	1724	91.85%	35.90%	0.0819	67.86	-1033.34	0.0000	0.1079	0.0358	0.0013	0.0049
136	35	31	26D	26F	1723	91.80%	35.93%	0.0843	67.96	-1030.21	0.0000	0.1078	0.0155	0.0002	0.0110
137	35	31	26E	26F	1719	91.58%	35.89%	0.0828	68.30	-1029.27	0.0000	0.0939	0.0254	0.0005	0.0174
138	35	31	26G	26F	1723	91.80%	35.98%	0.0758	67.21	-1040.39	0.0000	0.0537	0.0070	0.3473	0.0070
139	35	36	26A	26F	1702	90.68%	36.02%	0.0766	67.92	-1027.10	0.0000	0.0142	0.0492	0.0191	0.0045
140	35	36	26B	26F	1703	90.73%	35.94%	0.0833	67.65	-1019.55	0.0000	0.0285	0.0646	0.0000	0.0020
141	35	36	26C	26F	1703	90.73%	35.94%	0.0815	67.47	-1021.55	0.0000	0.0354	0.0654	0.0004	0.0035
142	35	36	26D	26F	1702	90.68%	35.96%	0.0839	67.57	-1018.44	0.0000	0.0361	0.0430	0.0001	0.0079
143	35	36	26E	26F	1699	90.52%	35.90%	0.0821	68.51	-1018.14	0.0000	0.0251	0.0584	0.0001	0.0115
144	35	36	26G	26F	1703	90.73%	36.00%	0.0743	67.12	-1030.09	0.0000	0.0123	0.0234	0.2645	0.0051
145	37	30	26A	26F	1730	92.17%	36.18%	0.0868	69.13	-1033.96	0.0000	0.0002	0.0014	0.0171	0.0128
146	37	30	26B	26F	1731	92.22%	36.11%	0.0928	68.46	-1027.08	0.0000	0.0002	0.0116	0.0001	0.0060
147	37	30	26C	26F	1731	92.22%	38.11%	0.0903	69.04	-1029.90	0.0000	0.0004	0.0054	0.0009	0.0101
148	37	30	26D	26F	1730	92.17%	36.13%	0.0919	68.67	-1027.64	0.0000	0.0004	0.0063	0.0003	0.0191
149	37	30	26E	26F	1726	91.96%	36.10%	0.0894	68.54	-1027.88	0.0000	0.0008	0.0064	0.0015	0.0253
150	37	30	26G	26F	1730	92.17%	36.18%	0.0841	67.98	-1037.01	0.0000	0.0002	0.0013	0.2563	0.0151

1996 (Total:1877)

						% OF USEAB	% WHO ME	CFADDEN'	OF CORRECT		AMSR	A GROUP	M GROUP	S GROUP	R GROUP
COMBINATION	A?	M?	S?	R?	N	SERVATIO	RY GUIDE	R2	REDICTION	LLF	X2-PVALUE	X2-PVALUE	X2-PVALUE	X2-PVALUE	X2-PVALUE
151	37	31	26A	26F	1731	92.22%	36.16%	0.0846	67.94	-1036.88	0.0000	0.0001	0.0144	0.0380	0.0079
152	37	31	26B	26F	1732	92.27%	36.09%	0.0920	68.71	-1028.40	0.0000	0.0001	0.0253	0.0000	0.0045
153	37	31	26C	26F	1732	92.27%	36.09%	0.0886	68.19	-1032.22	0.0000	0.0002	0.0293	0.0010	0.0067
154	37	31	26D	26F	1731	92.22%	36.11%	0.0913	68.92	-1028.79	0.0000	0.0003	0.0121	0.0001	0.0162
155	37	31	26E	26F	1727	92.01%	36.07%	0.0883	68.79	-1029.45	0.0000	0.0005	0.0175	0.0013	0.0200
156	37	31	26G	26F	1731	92.22%	36.16%	0.0828	67.71	-1038.89	0.0000	0.0001	0.0055	0.3019	0.0124
157	37	36	26A	26F	1710	91.10%	36.20%	0.0814	67.78	-1028.21	0.0000	0.0001	0.1520	0.0123	0.0053
158	37	36	26B	26F	1711	91.16%	36.12%	0.0892	68.26	-1019.32	0.0000	0.0001	0.2036	0.0000	0.0024
159	37	36	26C	26F	1711	91.16%	36.12%	0.0860	67.62	-1022.88	0.0000	0.0002	0.1947	0.0002	0.0043
160	37	36	26D	26F	1710	91.10%	36.14%	0.0888	68.89	-1019.36	0.0000	0.0003	0.1251	0.0000	0.0108
161	37	36	26E	26F	1707	90.94%	36.09%	0.0856	67.55	-1020.71	0.0000	0.0004	0.1695	0.0002	0.0120
162	37	36	26G	26F	1711	91.16%	36.18%	0.0789	66.86	-1031.43	0.0000	0.0001	0.1140	0.2434	0.0081
MAX					1732	92.27%	36.22%	0.0970	69.71	-1011.96	0.0001	0.2937	0.4185	0.5938	0.0509
MIN					1696	90.36%	35.84%	0.0582	66.24	-1046.17	0.0000	0.0000	0.0004	0.0000	0.0016

Appendix D.

Regression Runs in the Consideration of All Avoidance, Modification, Substitution, and Replacement Questions Simultaneously for 1994

Percentage of Calories from Total Fat
Percentage of Calories from Saturated Fat
Dietary Guideline for Fat

```
|_*
|_* PERCENTAGE OF CALORIES FROM TOTAL FAT
|_*
|_
|_ols pctfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|    emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|    wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|    lcaldiet preglac kq2fa &
|    kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|    kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|    kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|    kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|    kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|    kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|    kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|    kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR= 5807 CURRENT PAR= 7000
 OLS ESTIMATION
    1612 OBSERVATIONS     DEPENDENT VARIABLE = PCTFAT
...NOTE..SAMPLE RANGE SET TO:    1, 1836

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =   0.2268     R-SQUARE ADJUSTED =   0.1810
VARIANCE OF THE ESTIMATE-SIGMA**2 =   52.175
STANDARD ERROR OF THE ESTIMATE-SIGMA =   7.2232
SUM OF SQUARED ERRORS-SSE=   79358.
MEAN OF DEPENDENT VARIABLE =   33.672
LOG OF THE LIKELIHOOD FUNCTION = -5427.90

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =       55.120
    (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =   4.0094
 SCHWARZ (1978) CRITERION - LOG SC =               4.3134
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
   GENERALIZED CROSS VALIDATION - GCV =            55.296
 HANNAN AND QUINN (1979) CRITERION =               61.697
 RICE (1984) CRITERION =                           55.495
 SHIBATA (1981) CRITERION =                        54.788
 SCHWARZ (1978) CRITERION - SC =                   74.694
 AKAIKE (1974) INFORMATION CRITERION - AIC =       55.113

                    ANALYSIS OF VARIANCE - FROM MEAN
                      SS            DF           MS                F
REGRESSION          23278.          90.        258.64            4.957
ERROR               79358.        1521.        52.175          P-VALUE
TOTAL             0.10264E+06     1611.        63.709            0.000

                    ANALYSIS OF VARIANCE - FROM ZERO
                      SS            DF           MS                F
REGRESSION        0.18510E+07       91.        20340.          389.846
ERROR               79358.        1521.        52.175          P-VALUE
TOTAL             0.19303E+07     1612.        1197.5            0.000

VARIABLE   ESTIMATED  STANDARD   T-RATIO        PARTIAL STANDARDIZED ELASTICITY
  NAME    COEFFICIENT   ERROR    1521 DF   P-VALUE CORR. COEFFICIENT  AT MEANS
BMI_SP    0.50296E-01 0.3703E-01   1.358    0.175 0.035     0.0333     0.0394
LFATDIET  -3.0278     0.6717      -4.508    0.000-0.115    -0.1141    -0.0090
NE       -0.81591     0.5514      -1.480    0.139-0.038    -0.0406    -0.0048
MW       -0.31764     0.4781     -0.6644    0.507-0.017    -0.0178    -0.0026
WEST      -1.0539     0.5431      -1.941    0.053-0.050    -0.0523    -0.0061
```

MSANCC	-0.68969	0.4423	-1.559	0.119-0.040	-0.0425	-0.0084
NMSA	0.40146	0.4979	0.8062	0.420 0.021	0.0221	0.0031
POVCAT2	0.67018E-02	0.5250	0.1277E-01	0.990 0.000	0.0004	0.0001
POVCAT3	1.0468	0.5934	1.764	0.078 0.045	0.0619	0.0104
EMP	0.59198	0.5075	1.166	0.244 0.030	0.0365	0.0103
REGEX	0.12872	0.4278	0.3009	0.764 0.008	0.0081	0.0019
MODEX	0.99866E-01	0.5974	0.1672	0.867 0.004	0.0042	0.0004
GOODH	0.78941	0.5181	1.524	0.128 0.039	0.0376	0.0193
FSYES	1.2815	0.7112	1.802	0.072 0.046	0.0509	0.0043
VEGEY	0.71820	1.201	0.5981	0.550 0.015	0.0155	0.0006
WINTER	-0.60259	0.5100	-1.182	0.238-0.030	-0.0315	-0.0040
SPRING	-0.65459	0.5153	-1.270	0.204-0.033	-0.0352	-0.0047
SUMMER	-0.84000	0.4839	-1.736	0.083-0.044	-0.0470	-0.0069
WKDYWKDY	-0.35376	1.169	-0.3026	0.762-0.008	-0.0221	-0.0050
WKDYWKED	0.22160	1.159	0.1911	0.848 0.005	0.0139	0.0032
AGE	0.13039	0.6764E-01	1.928	0.054 0.049	0.2813	0.1910
AGE2	-0.12042E-02	0.6646E-03	-1.812	0.070-0.046	-0.2700	-0.0976
MALE	-0.99721	0.4148	-2.404	0.016-0.062	-0.0625	-0.0145
HS	-0.54499	0.5369	-1.015	0.310-0.026	-0.0327	-0.0057
COL	-1.0558	0.5590	-1.889	0.059-0.048	-0.0653	-0.0132
NHISP	-0.61726	0.7161	-0.8620	0.389-0.022	-0.0214	-0.0168
BLACK	-0.30951	0.6128	-0.5051	0.614-0.013	-0.0126	-0.0011
OTHER	-3.5179	0.8973	-3.920	0.000-0.100	-0.1043	-0.0062
NVSMOKED	-0.76154	0.4920	-1.548	0.122-0.040	-0.0476	-0.0105
SMOKEN	0.16672	0.5232	0.3187	0.750 0.008	0.0094	0.0014
LCALDIET	-0.11793	0.8063	-0.1463	0.884-0.004	-0.0038	-0.0002
PREGLAC	1.9286	2.021	0.9544	0.340 0.024	0.0208	0.0004
KQ2FA	1.2932	0.5887	2.197	0.028 0.056	0.0493	0.0345
KQ27S	-0.50794	0.4496	-1.130	0.259-0.029	-0.0280	-0.0040
KQ27R	-1.0280	0.6950	-1.479	0.139-0.038	-0.0360	-0.0026
KQ27N	-2.6441	0.8522	-3.103	0.002-0.079	-0.0957	-0.0072
KQ28S	-1.6555	0.5150	-3.215	0.001-0.082	-0.1017	-0.0198
KQ28R	-1.0692	0.6259	-1.708	0.088-0.044	-0.0521	-0.0059
KQ28N	-1.2754	0.6909	-1.846	0.065-0.047	-0.0630	-0.0073
KQ29S	1.7637	1.171	1.507	0.132 0.039	0.1027	0.0165
KQ29R	1.0690	1.201	0.8900	0.374 0.023	0.0634	0.0108
KQ29N	1.4941	1.189	1.257	0.209 0.032	0.0876	0.0144
KQ32L	0.89099E-01	0.6639	0.1342	0.893 0.003	0.0055	0.0011
KQ32M	-0.88590E-01	0.7055	-0.1256	0.900-0.003	-0.0053	-0.0009
KQ32G	-0.35956	0.8160	-0.4406	0.660-0.011	-0.0144	-0.0012
KQ33_A2	0.29788E-01	0.4262	0.6989E-01	0.944 0.002	0.0018	0.0004
KQ33_A3	0.26710	0.6356	0.4202	0.674 0.011	0.0109	0.0009
KQ33_A4	0.51718	0.7833	0.6603	0.509 0.017	0.0169	0.0011
KQ33_B2	-0.17310	0.4156	-0.4166	0.677-0.011	-0.0105	-0.0020
KQ33_B3	-1.4327	0.7817	-1.833	0.067-0.047	-0.0455	-0.0029
KQ33_B4	-1.9504	1.000	-1.950	0.051-0.050	-0.0518	-0.0027
KQ342	0.72388	0.5894	1.228	0.220 0.031	0.0440	0.0081
KQ343	1.7899	0.6415	2.790	0.005 0.071	0.1018	0.0154
KQ344	0.79433	0.7577	1.048	0.295 0.027	0.0367	0.0038
KQ35S	2.0433	1.745	1.171	0.242 0.030	0.1204	0.0200
KQ35M	2.5369	1.753	1.447	0.148 0.037	0.1586	0.0402
KQ35L	2.6468	1.847	1.433	0.152 0.037	0.1032	0.0085
KQ372	0.92386	0.4316	2.141	0.032 0.055	0.0554	0.0098
KQ373	2.3929	0.5459	4.384	0.000 0.112	0.1205	0.0144
KQ374	1.6799	0.6639	2.530	0.011 0.065	0.0669	0.0057
KQ30S	0.11135	0.6743	0.1651	0.869 0.004	0.0069	0.0015
KQ30R	0.38241	0.7520	0.5085	0.611 0.013	0.0216	0.0032
KQ30N	-1.1898	0.8293	-1.435	0.152-0.037	-0.0577	-0.0065
KQ31S	-0.37427	0.4647	-0.8054	0.421-0.021	-0.0207	-0.0030
KQ31R	0.34043	0.7771	0.4381	0.661 0.011	0.0115	0.0008
KQ31N	0.16932	0.5558	0.3046	0.761 0.008	0.0084	0.0010
KQ36S	-0.74657E-01	0.4837	-0.1543	0.877-0.004	-0.0037	-0.0004
KQ36R	0.39359	1.163	0.3383	0.735 0.009	0.0087	0.0004
KQ36N	2.8204	0.7117	3.963	0.000 0.101	0.1048	0.0082
KQ26_AA	-0.36213	0.5745	-0.6304	0.529-0.016	-0.0185	-0.0023
KQ26_AS	-0.48557E-01	0.5026	-0.9661E-01	0.923-0.002	-0.0029	-0.0005
KQ26_AR	0.30234	0.6126	0.4935	0.622 0.013	0.0134	0.0013

KQ26_BA	-0.97412	0.5295	-1.840	0.066-0.047	-0.0573	-0.0095
KQ26_BS	1.1647	0.5920	1.967	0.049 0.050	0.0520	0.0051
KQ26_BR	0.27182	0.6474	0.4199	0.675 0.011	0.0112	0.0010
KQ26_CA	-2.4517	0.7097	-3.455	0.001-0.088	-0.1078	-0.0105
KQ26_CS	-1.0308	0.5439	-1.895	0.058-0.049	-0.0572	-0.0082
KQ26_CR	0.69100E-01	0.5810	0.1189	0.905 0.003	0.0033	0.0004
KQ26_DA	-0.96375	0.6812	-1.415	0.157-0.036	-0.0458	-0.0050
KQ26_DS	-0.14633	0.5248	-0.2788	0.780-0.007	-0.0089	-0.0016
KQ26_DR	-0.38290	0.6302	-0.6075	0.544-0.016	-0.0167	-0.0016
KQ26_EA	0.83221E-01	0.6226	0.1337	0.894 0.003	0.0046	0.0006
KQ26_ES	-0.24865	0.5515	-0.4509	0.652-0.012	-0.0146	-0.0024
KQ26_ER	-0.28383	0.6696	-0.4238	0.672-0.011	-0.0111	-0.0009
KQ26_GA	-1.5591	1.003	-1.555	0.120-0.040	-0.0757	-0.0085
KQ26_GS	-0.31214	0.9090	-0.3434	0.731-0.009	-0.0184	-0.0062
KQ26_GR	-0.22647E-02	1.018	-0.2225E-02	0.998 0.000	-0.0001	0.0000
KQ[illegible]_FA	-0.60738	0.8308	-0.7310	0.465-0.019	[illegible]	-0.0029
K[illegible]_FS	-0.42364	0.7251	-0.5842	0.559-0.015	[illegible]	-[illegible].0075
KQ2[illegible]_FR	-0.38101	0.8141	-0.4680	0.640-0.012	[illegible]	-0.0017
CONSTANT	28.219	3.413	8.269	0.000 0.207	0.0000	0.8380

```
DURBIN-WATSON = 1.9702    VON NEUMANN RATIO = 1.9714    RHO =  0.01455
RESIDUAL SUM = -0.41961E-10  RESIDUAL VARIANCE =   52.175
SUM OF ABSOLUTE ERRORS=    8990.9
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.2268
RUNS TEST:  804 RUNS,  793 POS,    0 ZERO,  819 NEG  NORMAL STATISTIC = -0.1391
COEFFICIENT OF SKEWNESS =    0.0223 WITH STANDARD DEVIATION OF 0.0610
COEFFICIENT OF EXCESS KURTOSIS =    0.1928 WITH STANDARD DEVIATION OF 0.1218

    GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
OBSERVED  3.0  0.0  3.0  2.0  0.0  4.0  1.0  7.0  3.0  6.0  4.0  7.0 20.0 19.0 18.0 21.0 24.0 22.0 36.0
2.0
         47.0 45.0 43.0 64.0 74.0 55.0 61.0 68.0 55.0 75.0 64.0 59.0 62.0 64.0 64.0 58.0 50.0 43.0 44.0
2.0
         43.0 30.0 31.0 33.0 33.0 12.0  5.0 11.0 11.0  8.0  9.0  4.0  4.0  5.0  4.0  1.0  2.0  0.0  4.0
.0

EXPECTED  3.1  1.1  1.5  1.9  2.4  3.2  4.0  5.2  6.4  7.9  9.5 11.6 14.0 16.4 19.3 22.6 25.8 29.5 33.2
7.1
         40.9 44.8 48.5 52.1 55.1 58.2 60.5 62.2 63.7 64.2 64.2 63.7 62.2 60.5 58.2 55.1 52.1 48.5 44.8
0.9
         37.1 33.2 29.5 25.8 22.6 19.3 16.4 14.0 11.6  9.5  7.9  6.4  5.2  4.0  3.2  2.4  1.9  1.5  1.1
.1

CHI-SQUARE =    71.3652 WITH-33 DEGREES OF FREEDOM
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
```

```
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =    4.5003984     WITH   57 AND 1521 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   256.52271     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.22220
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =    3.4386331     WITH    3 AND 1521 D.F.  P-VALUE= 0.01630
WALD CHI-SQUARE STATISTIC =   10.315899     WITH    3 D.F.  P-VALUE= 0.01606
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.29081
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =    3.5062157     WITH    3 AND 1521 D.F.  P-VALUE= 0.01486
WALD CHI-SQUARE STATISTIC =   10.518647     WITH    3 D.F.  P-VALUE= 0.01463
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.28521
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =    1.3161593     WITH    3 AND 1521 D.F.  P-VALUE= 0.26750
WALD CHI-SQUARE STATISTIC =   3.9484778     WITH    3 D.F.  P-VALUE= 0.26708
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.75979
|_test
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
```

```
end
STATISTIC =  0.19571944       WITH    3 AND 1521 D.F.   P-VALUE= 0.89935
ALD CHI-SQUARE STATISTIC =  [illegible]715833     WITH    3 D.F.   P-VALUE= 0.89937
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
test
test kq33_a2=0
test kq33_a3=0
test kq33_a4=0
end
STATISTIC =  0.18836741     WITH    3 AND 1521 D.F.   P-VALUE= 0.90435
ALD CHI-SQUARE STATISTIC =  0.56510224     WITH    3 D.F.   P-VALUE= 0.90437
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
test
test kq33_b2=0
test kq33_b3=0
test kq33_b4=0
end
STATISTIC =   2.1520992     WITH    3 AND 1521 D.F.   P-VALUE= 0.09187
ALD CHI-SQUARE STATISTIC =   6.4562976     WITH    3 D.F.   P-VALUE= 0.09140
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.46466
test
test kq342=0
test kq343=0
test kq344=0
end
STATISTIC =   3.2893983     WITH    3 AND 1521 D.F.   P-VALUE= 0.01998
ALD CHI-SQUARE STATISTIC =   9.8681949     WITH    3 D.F.   P-VALUE= 0.01972
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.30401
test
test kq35s=0
test kq35m=0
test kq351=0
end
STATISTIC =   1.0379640     WITH    3 AND 1521 D.F.   P-VALUE= 0.37472
ALD CHI-SQUARE STATISTIC =   3.1138919     WITH    3 D.F.   P-VALUE= 0.37440
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.96342
test
test kq372=0
test kq373=0
test kq374=0
end
STATISTIC =   6.7699672     WITH    3 AND 1521 D.F.   P-VALUE= 0.00016
ALD CHI-SQUARE STATISTIC =   20.309902     WITH    3 D.F.   P-VALUE= 0.00015
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.14771
test
test kq30s=0
test kq30r=0
test kq30n=0
end
STATISTIC =   2.4576554     WITH    3 AND 1521 D.F.   P-VALUE= 0.06133
ALD CHI-SQUARE STATISTIC =   7.3729663     WITH.   3 D.F.   P-VALUE= 0.06091
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.40689
test
test kq31s=0
test kq31r=0
test kq31n=0
end
STATISTIC =  0.49111690     WITH    3 AND 1521 D.F.   P-VALUE= 0.68849
ALD CHI-SQUARE STATISTIC =   1.4733507     WITH    3 D.F.   P-VALUE= 0.68843
PPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
test
test kq36s=0
test kq36r=0
test kq36n=0
end
STATISTIC =   5.6764752     WITH    3 AND 1521 D.F.   P-VALUE= 0.00073
ALD CHI-SQUARE STATISTIC =   17.029425     WITH    3 D.F.   P-VALUE= 0.00070
```

```
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.17617
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =  0.33892261     WITH    3 AND 1521 D.F.  P-VALUE= 0.79720
WALD CHI-SQUARE STATISTIC =   1.0167678     WITH    3 D.F.  P-VALUE= 0.79719
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
F STATISTIC =   4.0073085     WITH    3 AND 1521 D.F.  P-VALUE= 0.00746
WALD CHI-SQUARE STATISTIC =   12.021926     WITH    3 D.F.  P-VALUE= 0.00731
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24954
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   4.7935220     WITH    3 AND 1521 D.F.  P-VALUE= 0.00250
WALD CHI-SQUARE STATISTIC =   14.380566     WITH    3 D.F.  P-VALUE= 0.00243
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.20861
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =  0.78405366     WITH    3 AND 1521 D.F.  P-VALUE= 0.50280
WALD CHI-SQUARE STATISTIC =   2.3521610     WITH    3 D.F.  P-VALUE= 0.50260
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.19204008     WITH    3 AND 1521 D.F.  P-VALUE= 0.90186
WALD CHI-SQUARE STATISTIC =  0.57612024     WITH    3 D.F.  P-VALUE= 0.90188
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =   2.1489723     WITH    3 AND 1521 D.F.  P-VALUE= 0.09225
WALD CHI-SQUARE STATISTIC =   6.4469170     WITH    3 D.F.  P-VALUE= 0.09178
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.46534
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =  0.17903654     WITH    3 AND 1521 D.F.  P-VALUE= 0.91065
WALD CHI-SQUARE STATISTIC =  0.53710962     WITH    3 D.F.  P-VALUE= 0.91067
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_*
|_* PERCENTAGE OF CALORIES FROM SATURATED FAT
|_*

|_ols pctsfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|    emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|    wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|    lcaldiet preglac kq2fa &
|    kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|    kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
```

```
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR= 5807 CURRENT PAR= 7000
 OLS ESTIMATION
    1612 OBSERVATIONS     DEPENDENT VARIABLE = PCTSFAT
...NOTE..SAMPLE RANGE SET TO:     1, 1836

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =    0.2258     R-SQUARE ADJUSTED =   0.1800
VARIANCE OF THE ESTIMATE-SIGMA**2 =   10.134
STANDARD ERROR OF THE ESTIMATE-SIGMA =   3.1834
SUM OF SQUARED ERRORS-SSE=   15413.
MEAN OF DEPENDENT VARIABLE =   12.881
LOG OF THE LIKELIHOOD FUNCTION = -4107.09

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =       10.706
   (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =   2.3707
 SCHWARZ (1978) CRITERION - LOG SC =               2.6747
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
   GENERALIZED CROSS VALIDATION - GCV =             10.740
 HANNAN AND QUINN (1979) CRITERION =                11.983
 RICE (1984) CRITERION =                            10.779
 SHIBATA (1981) CRITERION =                         10.641
 SCHWARZ (1978) CRITERION - SC =                    14.508
 AKAIKE (1974) INFORMATION CRITERION - AIC =        10.705

                    ANALYSIS OF VARIANCE - FROM MEAN
                      SS            DF             MS                  F
REGRESSION          4495.4         90.          49.949               4.929
ERROR               15413.        1521.         10.134             P-VALUE
TOTAL               19909.        1611.         12.358               0.000

                    ANALYSIS OF VARIANCE - FROM ZERO
                      SS            DF             MS                  F
REGRESSION        0.27196E+06      91.          2988.6             294.913
ERROR               15413.        1521.         10.134             P-VALUE
TOTAL             0.28737E+06     1612.         178.27               0.000


VARIABLE   ESTIMATED  STANDARD   T-RATIO        PARTIAL STANDARDIZED ELASTICITY
  NAME    COEFFICIENT   ERROR    1521 DF   P-VALUE CORR. COEFFICIENT  AT MEANS
BMI_SP    0.23913E-01 0.1693E-01   1.412     0.158 0.036      0.0360     0.0490
LFATDIET  -1.2967     0.2950      -4.395     0.000-0.112     -0.1109    -0.0101
NE       -0.64544     0.2421      -2.666     0.008-0.068     -0.0730    -0.0099
MW       -0.23132     0.2135      -1.083     0.279-0.028     -0.0294    -0.0049
WEST     -0.67869     0.2357      -2.879     0.004-0.074     -0.0765    -0.0103
MSANCC   -0.34947     0.1923      -1.817     0.069-0.047     -0.0489    -0.0112
NMSA      0.32103     0.2163       1.484     0.138 0.038      0.0402     0.0065
POVCAT2   0.22652E-01 0.2308     0.9816E-01 0.922 0.003      0.0031     0.0007
POVCAT3   0.47977     0.2609       1.839     0.066 0.047      0.0644     0.0125
EMP       0.22897     0.2189       1.046     0.296 0.027      0.0321     0.0105
REGEX     0.66561E-01 0.1906      0.3492     0.727 0.009      0.0095     0.0025
MODEX     0.24338E-01 0.2595     0.9377E-01 0.925 0.002      0.0023     0.0002
GOODH     0.33217     0.2299       1.445     0.149 0.037      0.0359     0.0213
FSYES     0.53963     0.3107       1.737     0.083 0.044      0.0487     0.0048
VEGEY     0.28849     0.4809      0.5999     0.549 0.015      0.0141     0.0007
WINTER   -0.21181     0.2314     -0.9155     0.360-0.023     -0.0251    -0.0037
SPRING   -0.45281     0.2255      -2.008     0.045-0.051     -0.0553    -0.0085
```

SUMMER	-0.52095	0.2131	-2.445	0.015-0.063	-0.0662	-0.0111
WKDYWKDY	-0.61423	0.5817	-1.056	0.291-0.027	-0.0873	-0.0229
WKDYWKED	-0.28723	0.5762	-0.4985	0.618-0.013	-0.0409	-0.0109
AGE	0.39855E-01	0.2914E-01	1.368	0.172 0.035	0.1952	0.1526
AGE2	-0.40971E-03	0.2855E-03	-1.435	0.151-0.037	-0.2086	-0.0868
MALE	-0.98430E-01	0.1834	-0.5368	0.591-0.014	-0.0140	-0.0037
HS	-0.32691	0.2369	-1.380	0.168-0.035	-0.0445	-0.0090
COL	-0.61773	0.2499	-2.472	0.014-0.063	-0.0868	-0.0201
NHISP	-0.20550	0.3218	-0.6386	0.523-0.016	-0.0162	-0.0146
BLACK	0.19019	0.2772	0.6861	0.493 0.018	0.0175	0.0018
OTHER	-1.3388	0.3728	-3.591	0.000-0.092	-0.0902	-0.0062
NVSMOKED	-0.28539	0.2184	-1.307	0.192-0.033	-0.0405	-0.0103
SMOKEN	0.36135E-01	0.2308	0.1566	0.876 0.004	0.0046	0.0008
LCALDIET	0.17237	0.3568	0.4830	0.629 0.012	0.0125	0.0009
PREGLAC	-0.16749	0.6070	-0.2759	0.783-0.007	-0.0041	-0.0001
KQ2FA	0.37870	0.2727	1.389	0.165 0.036	0.0328	0.0264
KQ27S	-0.23795	0.1969	-1.208	0.227-0.031	-0.0298	-0.0049
KQ27R	-0.44685	0.3066	-1.457	0.145-0.037	-0.0356	-0.0030
KQ27N	-0.95751	0.3790	-2.526	0.012-0.065	-0.0787	-0.0068
KQ28S	-0.76048	0.2264	-3.359	0.001-0.086	-0.1061	-0.0238
KQ28R	-0.40859	0.2790	-1.464	0.143-0.038	-0.0452	-0.0059
KQ28N	-0.61633	0.3066	-2.010	0.045-0.051	-0.0691	-0.0092
KQ29S	1.1366	0.4742	2.397	0.017 0.061	0.1502	0.0278
KQ29R	0.85666	0.4871	1.759	0.079 0.045	0.1154	0.0225
KQ29N	1.2020	0.4818	2.495	0.013 0.064	0.1600	0.0302
KQ32L	0.10992E-02	0.2930	0.3751E-02	0.997 0.000	0.0002	0.0000
KQ32M	-0.84315E-01	0.3094	-0.2725	0.785-0.007	-0.0114	-0.0022
KQ32G	-0.15041	0.3627	-0.4147	0.678-0.011	-0.0136	-0.0013
KQ33_A2	0.11036	0.1890	0.5839	0.559 0.015	0.0155	0.0037
KQ33_A3	0.36419	0.2791	1.305	0.192 0.033	0.0336	0.0034
KQ33_A4	0.31644	0.3374	0.9378	0.349 0.024	0.0235	0.0018
KQ33_B2	-0.20823E-01	0.1846	-0.1128	0.910-0.003	-0.0029	-0.0006
KQ33_B3	-0.67062	0.3323	-2.018	0.044-0.052	-0.0483	-0.0036
KQ33_B4	-0.69937	0.4155	-1.683	0.093-0.043	-0.0422	-0.0026
KQ342	0.47317	0.2641	1.791	0.073 0.046	0.0653	0.0139
KQ343	0.80639	0.2813	2.867	0.004 0.073	0.1042	0.0182
KQ344	0.37718	0.3356	1.124	0.261 0.029	0.0395	0.0047
KQ35S	0.93337	0.7631	1.223	0.221 0.031	0.1248	0.0239
KQ35M	1.2108	0.7689	1.575	0.116 0.040	0.1719	0.0502
KQ35L	1.1349	0.8108	1.400	0.162 0.036	0.1005	0.0096
KQ372	0.41616	0.1931	2.155	0.031 0.055	0.0567	0.0115
KQ373	1.0589	0.2404	4.405	0.000 0.112	0.1210	0.0166
KQ374	0.85625	0.3009	2.845	0.004 0.073	0.0775	0.0076
KQ30S	-0.21933E-01	0.2991	-0.7333E-01	0.942-0.002	-0.0031	-0.0008
KQ30R	0.95576E-02	0.3337	0.2864E-01	0.977 0.001	0.0012	0.0002
KQ30N	-0.53417	0.3719	-1.436	0.151-0.037	-0.0589	-0.0076
KQ31S	-0.25063	0.2049	-1.223	0.221-0.031	-0.0315	-0.0052
KQ31R	0.10550	0.3380	0.3121	0.755 0.008	0.0081	0.0006
KQ31N	-0.22605E-01	0.2449	-0.9229E-01	0.926-0.002	-0.0025	-0.0003
KQ36S	-0.89478E-02	0.2125	-0.4211E-01	0.966-0.001	-0.0010	-0.0001
KQ36R	0.40381	0.5080	0.7949	0.427 0.020	0.0203	0.0010
KQ36N	1.3031	0.3324	3.920	0.000 0.100	0.1099	0.0099
KQ26_AA	-0.10685	0.2579	-0.4144	0.679-0.011	-0.0124	-0.0017
KQ26_AS	0.12994E-03	0.2204	0.5895E-03	1.000 0.000	0.0000	0.0000
KQ26_AR	0.30479	0.2685	1.135	0.257 0.029	0.0307	0.0035
KQ26_BA	-0.24004	0.2349	-1.022	0.307-0.026	-0.0320	-0.0061
KQ26_BS	0.52510	0.2586	2.031	0.042 0.052	0.0532	0.0061
KQ26_BR	0.19834	0.2848	0.6963	0.486 0.018	0.0185	0.0019
KQ26_CA	-0.77910	0.3137	-2.484	0.013-0.064	-0.0778	-0.0087
KQ26_CS	-0.36969	0.2449	-1.510	0.131-0.039	-0.0466	-0.0077
KQ26_CR	0.84162E-01	0.2598	0.3240	0.746 0.008	0.0091	0.0011
KQ26_DA	-0.33894	0.3049	-1.112	0.266-0.028	-0.0366	-0.0046
KQ26_DS	-0.22218E-01	0.2307	-0.9630E-01	0.923-0.002	-0.0031	-0.0006
KQ26_DR	-0.10750	0.2806	-0.3831	0.702-0.010	-0.0107	-0.0012
KQ26_EA	0.26752E-01	0.2844	0.9407E-01	0.925 0.002	0.0033	0.0005
KQ26_ES	-0.15499	0.2463	-0.6294	0.529-0.016	-0.0206	-0.0039
KQ26_ER	-0.18033	0.3032	-0.5947	0.552-0.015	-0.0161	-0.0015

```
KQ26_GA  -0.60303      0.4261       -1.415      0.157-0.036    -0.0664    -0.0086
KQ26_GS   0.33586E-01  0.3878        0.8660E-01 0.931 0.002     0.0045     0.0017
KQ26_GR   0.11693      0.4360        0.2682     0.789 0.007     0.0096     0.0008
KQ26_FA  -0.30172      0.3577       -0.8434     0.399-0.022    -0.0317    -0.0038
KQ26_FS  -0.48357E-01  0.3082       -0.1569     0.875-0.004    -0.0067    -0.0023
KQ26_FR  -0.56316E-01  0.3468       -0.1624     0.871-0.004    -0.0057    -0.0006
CONSTANT   10.556      1.515         6.966      0.000 0.176     0.0000     0.8195

DURBIN-WATSON = 1.9403    VON NEUMANN RATIO = 1.9415    RHO =  0.02981
RESIDUAL SUM = -0.16749E-10  RESIDUAL VARIANCE =   10.134
SUM OF ABSOLUTE ERRORS=   3977.5
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.2258
RUNS TEST:  808 RUNS,  788 POS,     0 ZERO,  824 NEG  NORMAL STATISTIC =  0.0699
COEFFICIENT OF SKEWNESS =   0.1740 WITH STANDARD DEVIATION OF 0.0610
COEFFICIENT OF EXCESS KURTOSIS =   0.3233 WITH STANDARD DEVIATION OF 0.1218

    GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
OBSERVED  3.0  1.0  0.0  0.0  0.0  7.0  1.0  0.0  7.0 11.0  7.0  8.0  6.0 17.0 18.0 24.0 17.0 31.0 38.0
30.0
         46.0 57.0 60.0 53.0 57.0 76.0 62.0 71.0 64.0 52.0 68.0 53.0 54.0 76.0 54.0 59.0 53.0 51.0 43.0
32.0
         29.0 35.0 36.0 25.0 15.0 22.0 16.0 11.0 17.0  8.0  2.0  3.0  5.0  4.0  4.0  1.0  4.0  1.0  1.0
5.0

EXPECTED  3.1  1.1  1.5  1.9  2.4  3.2  4.0  5.2  6.4  7.9  9.5 11.6 14.0 16.4 19.3 22.6 25.8 29.5 33.2
37.1
         40.9 44.8 48.5 52.1 55.1 58.2 60.5 62.2 63.7 64.2 64.2 63.7 62.2 60.5 58.2 55.1 52.1 48.5 44.8
40.9
         37.1 33.2 29.5 25.8 22.6 19.3 16.4 14.0 11.6  9.5  7.9  6.4  5.2  4.0  3.2  2.4  1.9  1.5  1.1
1.1

CHI-SQUARE =   78.3283 WITH-33 DEGREES OF FREEDOM
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
```

```
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   4.0573447     WITH   57 AND 1521 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   231.26865     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24647
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =   2.4667127     WITH    3 AND 1521 D.F.  P-VALUE= 0.06060
WALD CHI-SQUARE STATISTIC =   7.4001382     WITH    3 D.F.  P-VALUE= 0.06018
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.40540
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =   4.0266452     WITH    3 AND 1521 D.F.  P-VALUE= 0.00726
WALD CHI-SQUARE STATISTIC =   12.079936     WITH    3 D.F.  P-VALUE= 0.00711
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24835
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =   2.9464395     WITH    3 AND 1521 D.F.  P-VALUE= 0.03183
WALD CHI-SQUARE STATISTIC =   8.8393186     WITH    3 D.F.  P-VALUE= 0.03151
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.33939
|_test
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_end
F STATISTIC =  0.13273198     WITH    3 AND 1521 D.F.  P-VALUE= 0.94060
WALD CHI-SQUARE STATISTIC =  0.39819595     WITH    3 D.F.  P-VALUE= 0.94061
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =  0.69513142     WITH    3 AND 1521 D.F.  P-VALUE= 0.55502
WALD CHI-SQUARE STATISTIC =   2.0853942     WITH    3 D.F.  P-VALUE= 0.55487
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
```

```
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =   2.2289121      WITH    3 AND 1521 D.F.  P-VALUE= 0.08304
WALD CHI-SQUARE STATISTIC =   6.6867364     WITH    3 D.F.   P-VALUE= 0.08258
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.44865
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =   3.1643894      WITH    3 AND 1521 D.F.  P-VALUE= 0.02369
WALD CHI-SQUARE STATISTIC =   9.4931683     WITH    3 D.F.   P-VALUE= 0.02340
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.31602
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_end
F STATISTIC =   1.3451584      WITH    3 AND 1521 D.F.  P-VALUE= 0.25809
WALD CHI-SQUARE STATISTIC =   4.0354752     WITH    3 D.F.   P-VALUE= 0.25766
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.74341
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =   7.0316733      WITH    3 AND 1521 D.F.  P-VALUE= 0.00011
WALD CHI-SQUARE STATISTIC =   21.095020     WITH    3 D.F.   P-VALUE= 0.00010
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.14221
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =   1.6416657      WITH    3 AND 1521 D.F.  P-VALUE= 0.17785
WALD CHI-SQUARE STATISTIC =   4.9249972     WITH    3 D.F.   P-VALUE= 0.17737
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.60914
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =  0.69072748      WITH    3 AND 1521 D.F.  P-VALUE= 0.55771
WALD CHI-SQUARE STATISTIC =   2.0721824     WITH    3 D.F.   P-VALUE= 0.55756
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
F STATISTIC =   5.4596384      WITH    3 AND 1521 D.F.  P-VALUE= 0.00099
WALD CHI-SQUARE STATISTIC =   16.378915     WITH    3 D.F.   P-VALUE= 0.00095
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.18316
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =  0.72278065      WITH    3 AND 1521 D.F.  P-VALUE= 0.53838
WALD CHI-SQUARE STATISTIC =   2.1683420     WITH    3 D.F.   P-VALUE= 0.53821
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
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|_test kq26_br=0
|_end
F STATISTIC =   2.7061933     WITH    3 AND 1521 D.F.  P-VALUE= 0.04400
WALD CHI-SQUARE STATISTIC =   8.1185799     WITH    3 D.F.  P-VALUE= 0.04362
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.36952
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   2.8244163     WITH    3 AND 1521 D.F.  P-VALUE= 0.03753
WALD CHI-SQUARE STATISTIC =   8.4732490     WITH    3 D.F.  P-VALUE= 0.03718
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.35406
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =  0.52506964     WITH    3 AND 1521 D.F.  P-VALUE= 0.66509
WALD CHI-SQUARE STATISTIC =   1.5752089     WITH    3 D.F.  P-VALUE= 0.66502
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.33179014     WITH    3 AND 1521 D.F.  P-VALUE= 0.80237
WALD CHI-SQUARE STATISTIC =  0.99537043     WITH    3 D.F.  P-VALUE= 0.80237
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =   2.7162140     WITH    3 AND 1521 D.F.  P-VALUE= 0.04341
WALD CHI-SQUARE STATISTIC =   8.1486421     WITH    3 D.F.  P-VALUE= 0.04304
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.36816
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =  0.43178734     WITH    3 AND 1521 D.F.  P-VALUE= 0.73026
WALD CHI-SQUARE STATISTIC =   1.2953620     WITH    3 D.F.  P-VALUE= 0.73023
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_*
|_* DIETARY GUIDELINE FOR FAT
|_*

|_logit fatdgy bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|     lcaldiet preglac kq2fa &
|     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat iter=100

REQUIRED MEMORY IS PAR= 4702 CURRENT PAR= 7000
FOR MAXIMUM EFFICIENCY USE AT LEAST PAR=  5861
 LOGIT ANALYSIS     DEPENDENT VARIABLE =FATDGY   CHOICES =  2
    1612. TOTAL OBSERVATIONS
     538. OBSERVATIONS AT ONE
```

```
   1074. OBSERVATIONS AT ZERO
 100 MAXIMUM ITERATIONS
CONVERGENCE TOLERANCE =0.00100

LOG OF LIKELIHOOD WITH CONSTANT TERM ONLY =     -1026.5
BINOMIAL  ESTIMATE = 0.3337
ITERATION  0       LOG OF LIKELIHOOD FUNCTION =    -1026.5

ITERATION  1 ESTIMATES
-0.28192E-02 0.52749      0.21048      0.10782      0.30686      0.21076
 0.26371E-01-0.12690     -0.35879     -0.24017      0.85143E-03-0.88959E-01
-0.15986E-01-0.34906     -0.23965     -0.29142E-01 0.18153      0.13668
 0.24469      0.70565E-01 0.63399E-02-0.33042E-04 0.15995      0.33404E-02
 0.24477      0.10651      0.19001      0.99200      0.16123     -0.15321
 0.28889     -0.31901     -0.36739      0.38574E-01 0.14827E-01 0.37229
 0.24566      0.14006      0.27606     -0.22707     -0.11488     -0.20296
 0.21339      0.30519      0.26886     -0.14567     -0.14662     -0.25225
 0.75233E-02 0.33142      0.55754     -0.11880     -0.40410     -0.17033
-0.93909     -1.1170      -1.0041      -0.25753     -0.52666     -0.49425
-0.83449E-01-0.85244E-01 0.16773      0.99314E-01 0.16415     -0.47451E-01
-0.75328E-01-0.33526     -0.66033      0.12885      0.13726      0.91681E-02
 0.17179     -0.23710     -0.17136      0.69684      0.33038      0.52882E-01
 0.23303     -0.10463E-01 0.18756      0.53056E-01 0.13574     -0.12002
 0.40586      0.42958E-01 0.63510E-01-0.17302     -0.11272      0.10985E-01
-0.12047
ITERATION  1       LOG OF LIKELIHOOD FUNCTION =    -879.37

ITERATION  2 ESTIMATES
-0.33670E-02 0.54461      0.27787      0.16280      0.37828      0.26158
 0.43463E-01-0.17627     -0.43200     -0.27571      0.87964E-02-0.79281E-01
-0.56639E-01-0.48778     -0.24929     -0.46902E-01 0.21353      0.16080
 0.29972      0.94574E-01 0.84728E-02-0.46539E-04 0.18106     -0.85361E-02
 0.29574      0.13616      0.24883      1.1309       0.19918     -0.16835
 0.30857     -0.40433     -0.45486      0.31986E-01-0.15130E-02 0.38633
 0.31217      0.19289      0.34744     -0.31654     -0.17702     -0.26444
 0.23329      0.35512      0.31697     -0.16556     -0.18530     -0.30755
 0.55586E-02 0.42344      0.70415     -0.10441     -0.45541     -0.16703
-1.3363      -1.5472      -1.3944      -0.28355     -0.62812     -0.62296
-0.79735E-01-0.74224E-01 0.19404      0.10879      0.20698     -0.60736E-01
-0.91954E-01-0.42666     -1.0403       0.16198      0.18758      0.17092E-01
 0.18504     -0.28353     -0.21608      0.74316      0.38308      0.66963E-01
 0.26399      0.55372E-03 0.20303      0.45925E-01 0.16139     -0.14608
 0.40321      0.11689E-01 0.18906E-01-0.17823     -0.12007      0.14204E-01
 0.13507
ITERATION  2       LOG OF LIKELIHOOD FUNCTION =    -873.96

ITERATION  3 ESTIMATES
-0.34843E-02 0.54690      0.28671      0.17143      0.38679      0.26607
 0.45410E-01-0.18232     -0.44059     -0.27881      0.95922E-02-0.76770E-01
-0.64523E-01-0.50632     -0.25214     -0.47820E-01 0.21720      0.16491
 0.30305      0.94980E-01 0.88110E-02-0.48809E-04 0.18358     -0.92079E-02
 0.30277      0.14052      0.25610      1.1510       0.20333     -0.16919
 0.31244     -0.41393     -0.46354      0.30740E-01-0.36933E-02 0.38585
 0.32063      0.20042      0.35661     -0.33262     -0.19001     -0.27657
 0.23281      0.35810      0.32154     -0.16750     -0.19059     -0.31387
 0.40754E-02 0.43415      0.72303     -0.10242     -0.46219     -0.16680
-1.4335      -1.6482      -1.4913      -0.28584     -0.63911     -0.64167
-0.74661E-01-0.68556E-01 0.20170      0.10986      0.21289     -0.62432E-01
-0.92654E-01-0.43764     -1.1347       0.16673      0.19435      0.19425E-01
 0.18667     -0.28904     -0.22131      0.75110      0.39038      0.70130E-01
 0.26771      0.21236E-02 0.20404      0.44969E-01 0.16428     -0.15024
 0.39964      0.58016E-02 0.90239E-02-0.17864     -0.12068      0.13562E-01
 0.22248
ITERATION  3       LOG OF LIKELIHOOD FUNCTION =    -873.87

ITERATION  4 ESTIMATES
-0.34877E-02 0.54694      0.28687      0.17161      0.38693      0.26611
```

```
EXPECTED OBSERVATIONS AT 0  =        999.6   OBSERVED =   1074.0
EXPECTED OBSERVATIONS AT 1  =        612.4   OBSERVED =    538.0
SUM OF SQUARED "RESIDUALS" =           293.23
WEIGHTED SUM OF SQUARED "RESIDUALS" =     1609.0

HENSHER-JOHNSON PREDICTION SUCCESS TABLE
                                            OBSERVED    OBSERVED
                   PREDICTED  CHOICE          COUNT       SHARE
       ACTUAL          0          1
         0          780.682    293.318   1074.000      0.666
         1          293.318    244.682    538.000      0.334

PREDICTED COUNT     1074.000    538.000   1612.000      1.000
PREDICTED SHARE        0.666      0.334      1.000
PROP. SUCCESSFUL       0.727      0.455      0.636
SUCCESS INDEX          0.061      0.121      0.081
PROPORTIONAL ERROR     0.000      0.000
NORMALIZED SUCCESS INDEX                     0.182

DURBIN-WATSON = 2.0919    VON NEUMANN RATIO = 2.0932    RHO = -0.04677
RESIDUAL SUM = -0.54229E-04  RESIDUAL VARIANCE =  0.18190
SUM OF ABSOLUTE ERRORS=   586.64
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.1820
LOG-LIKELIHOOD FUNCTION =   -873.8675
RUNS TEST:  720 RUNS,  538 POS,    0 ZERO, 1074 NEG  NORMAL STATISTIC =  0.1183
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
```

```
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =   137.14539     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41562
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
WALD CHI-SQUARE STATISTIC =   2.5465564     WITH    3 D.F.  P-VALUE= 0.46694
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
WALD CHI-SQUARE STATISTIC =   3.8694353     WITH    3 D.F.  P-VALUE= 0.27591
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.77531
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
WALD CHI-SQUARE STATISTIC =   1.2579466     WITH    3 D.F.  P-VALUE= 0.73914
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_end
WALD CHI-SQUARE STATISTIC =   2.4054996     WITH    3 D.F.  P-VALUE= 0.49261
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
WALD CHI-SQUARE STATISTIC =   2.2603192     WITH    3 D.F.  P-VALUE= 0.52017
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
WALD CHI-SQUARE STATISTIC =   7.2448474     WITH    3 D.F.  P-VALUE= 0.06449
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41409
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
```

```
WALD CHI-SQUARE STATISTIC =   7.1964311     WITH    3 D.F.  P-VALUE= 0.06589
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41687
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq35l=0
|_end
WALD CHI-SQUARE STATISTIC =   10.955782     WITH    3 D.F.  P-VALUE= 0.01197
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.27383
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
WALD CHI-SQUARE STATISTIC =   15.085925     WITH    3 D.F.  P-VALUE= 0.00174
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.19886
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
WALD CHI-SQUARE STATISTIC =   2.7477616     WITH    3 D.F.  P-VALUE= 0.43217
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
WALD CHI-SQUARE STATISTIC =   1.4366501     WITH    3 D.F.  P-VALUE= 0.69697
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
WALD CHI-SQUARE STATISTIC =   12.434918     WITH    3 D.F.  P-VALUE= 0.00603
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24126
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
WALD CHI-SQUARE STATISTIC =   1.7000762     WITH    3 D.F.  P-VALUE= 0.63692
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
WALD CHI-SQUARE STATISTIC =   6.8815825     WITH    3 D.F.  P-VALUE= 0.07577
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.43595
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
WALD CHI-SQUARE STATISTIC =   13.030579     WITH    3 D.F.  P-VALUE= 0.00457
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.23023
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
WALD CHI-SQUARE STATISTIC =   2.8912212     WITH    3 D.F.  P-VALUE= 0.40870
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ea=0
```

```
|_test kq26_es=0
|_test kq26_er=0
|_end
WALD CHI-SQUARE STATISTIC =   2.1003844     WITH    3 D.F.  P-VALUE= 0.55184
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
WALD CHI-SQUARE STATISTIC =   5.7582043     WITH    3 D.F.  P-VALUE= 0.12399
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.52100
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =   1.0023546     WITH    3 D.F.  P-VALUE= 0.80068
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_*
|_stop
```

Appendix E.

Regression Runs in the Consideration of All Avoidance, Modification, Substitution, and Replacement Questions Simultaneously for 1995

Percentage of Calories from Total Fat
Percentage of Calories from Saturated Fat
Dietary Guideline for Fat

1995

```
|_*
|_* PERCENTAGE OF CALORIES FROM TOTAL FAT
|_*

|_ols pctfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|     lcaldiet preglac kq2fa &
|     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR= 6146 CURRENT PAR= 7000
 OLS ESTIMATION
    1734 OBSERVATIONS      DEPENDENT VARIABLE = PCTFAT
...NOTE..SAMPLE RANGE SET TO:    1, 1936

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =    0.2291     R-SQUARE ADJUSTED =   0.1868
VARIANCE OF THE ESTIMATE-SIGMA**2 =   49.952
STANDARD ERROR OF THE ESTIMATE-SIGMA =   7.0676
SUM OF SQUARED ERRORS-SSE=   82070.
MEAN OF DEPENDENT VARIABLE =   33.539
LOG OF THE LIKELIHOOD FUNCTION = -5804.59

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =       52.573
    (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =   3.9621
 SCHWARZ (1978) CRITERION - LOG SC =               4.2486
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
    GENERALIZED CROSS VALIDATION - GCV =            52.718
 HANNAN AND QUINN (1979) CRITERION =                58.442
 RICE (1984) CRITERION =                            52.880
 SHIBATA (1981) CRITERION =                         52.298
 SCHWARZ (1978) CRITERION - SC =                    70.004
 AKAIKE (1974) INFORMATION CRITERION - AIC =        52.568
```

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	24385.	90.	270.94	5.424
ERROR	82070.	1643.	49.952	P-VALUE
TOTAL	0.10645E+06	1733.	61.428	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	0.19749E+07	91.	21702.	434.456
ERROR	82070.	1643.	49.952	P-VALUE
TOTAL	0.20569E+07	1734.	1186.2	0.000

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 1643 DF	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
BMI_SP	0.70789E-01	0.3459E-01	2.047	0.041	0.050	0.0480	0.0563
LFATDIET	-2.1495	0.6758	-3.181	0.001	-0.078	-0.0796	-0.0060
NE	0.69301E-02	0.5034	0.1377E-01	0.989	0.000	0.0004	0.0000
MW	0.87060	0.4631	1.880	0.060	0.046	0.0470	0.0061
WEST	0.16197	0.5000	0.3240	0.746	0.008	0.0081	0.0009

MSANCC	0.46064	0.4347	1.060	0.289	0.026	0.0293	0.0064
NMSA	1.2219	0.5097	2.397	0.017	0.059	0.0688	0.0096
POVCAT2	-0.24977	0.5074	-0.4923	0.623	-0.012	-0.0156	-0.0030
POVCAT3	-0.16994	0.5786	-0.2937	0.769	-0.007	-0.0104	-0.0018
EMP	-0.38594E-01	0.4664	-0.8275E-01	0.934	-0.002	-0.0024	-0.0006
REGEX	-0.14805	0.3970	-0.3729	0.709	-0.009	-0.0094	-0.0021
MODEX	-0.30313	0.5722	-0.5297	0.596	-0.013	-0.0126	-0.0011
GOODH	-0.23817	0.4778	-0.4985	0.618	-0.012	-0.0118	-0.0058
FSYES	-1.7265	0.6814	-2.534	0.011	-0.062	-0.0640	-0.0048
VEGEY	-1.3322	1.147	-1.161	0.246	-0.029	-0.0270	-0.0010
WINTER	0.23844	0.4954	0.4813	0.630	0.012	0.0129	0.0017
SPRING	0.37066	0.4718	0.7856	0.432	0.019	0.0201	0.0026
SUMMER	-0.29273	0.4685	-0.6248	0.532	-0.015	-0.0167	-0.0024
WKDYWKDY	0.24956	0.9031	0.2763	0.782	0.007	0.0159	0.0037
WKDYWKED	0.85068	0.9005	0.9447	0.345	0.023	0.0542	0.0121
AGE	0.16284	0.6061E-01	2.687	0.007	0.066	0.3491	0.2612
AGE2	-0.15768E-02	0.5855E-03	-2.693	0.007	-0.066	-0.3667	-0.1493
MALE	-0.48604	0.3975	-1.223	0.222	-0.030	-0.0310	-0.0074
HS	-1.4474	0.5184	-2.792	0.005	-0.069	-0.0882	-0.0152
COL	-1.1861	0.5588	-2.123	0.034	-0.052	-0.0750	-0.0154
NHISP	0.28205E-01	0.7511	0.3755E-01	0.970	0.001	0.0009	0.0008
BLACK	-0.48142	0.5730	-0.8402	0.401	-0.021	-0.0191	-0.0015
OTHER	-2.0431	0.8560	-2.387	0.017	-0.059	-0.0596	-0.0034
NVSMOKED	-0.46188E-01	0.4580	-0.1009	0.920	-0.002	-0.0029	-0.0006
SMOKEN	0.59670	0.5119	1.166	0.244	0.029	0.0342	0.0050
LCALDIET	-1.5698	0.8755	-1.793	0.073	-0.044	-0.0488	-0.0030
PREGLAC	0.72255	1.541	0.4689	0.639	0.012	0.0083	0.0002
KQ2FA	1.1206	0.5914	1.895	0.058	0.047	0.0437	0.0299
KQ27S	-1.3396	0.4243	-3.157	0.002	-0.078	-0.0754	-0.0106
KQ27R	-1.7399	0.6656	-2.614	0.009	-0.064	-0.0613	-0.0043
KQ27N	-1.4615	0.7497	-1.949	0.051	-0.048	-0.0552	-0.0042
KQ28S	0.26113	0.4661	0.5602	0.575	0.014	0.0162	0.0030
KQ28R	0.61334	0.5854	1.048	0.295	0.026	0.0305	0.0034
KQ28N	0.55964	0.5929	0.9439	0.345	0.023	0.0287	0.0034
KQ29S	-4.1173	1.362	-3.024	0.003	-0.074	-0.2392	-0.0360
KQ29R	-4.2552	1.358	-3.133	0.002	-0.077	-0.2598	-0.0450
KQ29N	-4.8992	1.365	-3.588	0.000	-0.088	-0.2944	-0.0484
KQ32L	0.71361	0.6650	1.073	0.283	0.026	0.0454	0.0099
KQ32M	1.7388	0.7252	2.398	0.017	0.059	0.1050	0.0175
KQ32G	1.6417	0.8907	1.843	0.065	0.045	0.0610	0.0046
KQ33_A2	-0.23540	0.4164	-0.5653	0.572	-0.014	-0.0149	-0.0030
KQ33_A3	-0.34792	0.5993	-0.5805	0.562	-0.014	-0.0144	-0.0012
KQ33_A4	0.56399	0.7157	0.7880	0.431	0.019	0.0190	0.0013
KQ33_B2	1.0482	0.4014	2.611	0.009	0.064	0.0648	0.0117
KQ33_B3	0.91921	0.7280	1.263	0.207	0.031	0.0308	0.0020
KQ33_B4	-0.35566	1.172	-0.3034	0.762	-0.007	-0.0080	-0.0003
KQ342	-0.34295	0.5910	-0.5803	0.562	-0.014	-0.0213	-0.0039
KQ343	-0.58297	0.6176	-0.9440	0.345	-0.023	-0.0344	-0.0054
KQ344	-0.36602	0.7235	-0.5059	0.613	-0.012	-0.0165	-0.0016
KQ35S	4.1284	1.690	2.442	0.015	0.060	0.2521	0.0437
KQ35M	4.4826	1.693	2.647	0.008	0.065	0.2859	0.0693
KQ35L	4.8944	1.777	2.755	0.006	0.068	0.1919	0.0154
KQ372	1.5673	0.4424	3.543	0.000	0.087	0.0959	0.0167
KQ373	2.2307	0.5044	4.423	0.000	0.108	0.1172	0.0144
KQ374	2.2573	0.6558	3.442	0.001	0.085	0.0944	0.0082
KQ30S	-0.86605	0.5951	-1.455	0.146	-0.036	-0.0549	-0.0114
KQ30R	-0.76872	0.6647	-1.157	0.248	-0.029	-0.0434	-0.0061
KQ30N	-2.4337	0.7425	-3.278	0.001	-0.081	-0.1228	-0.0141
KQ31S	-0.20577E-01	0.4432	-0.4642E-01	0.963	-0.001	-0.0012	-0.0002
KQ31R	-0.46635	0.6724	-0.6936	0.488	-0.017	-0.0157	-0.0010
KQ31N	0.44809	0.5437	0.8242	0.410	0.020	0.0221	0.0024
KQ36S	0.29537	0.4656	0.6344	0.526	0.016	0.0153	0.0018
KQ36R	1.0523	0.8022	1.312	0.190	0.032	0.0288	0.0015
KQ36N	0.61780E-01	0.8258	0.7481E-01	0.940	0.002	0.0020	0.0001
KQ26_AA	-0.28367E-01	0.5445	-0.5209E-01	0.958	-0.001	-0.0015	-0.0002
KQ26_AS	1.0314	0.4717	2.186	0.029	0.054	0.0632	0.0111
KQ26_AR	0.73090	0.5949	1.229	0.219	0.030	0.0313	0.0028

```
KQ26_BA   -2.1697      0.4753        -4.565      0.000-0.112    -0.1340     -0.0242
KQ26_BS  -0.72605      0.5795        -1.253      0.210-0.031    -0.0322     -0.0030
KQ26_BR   -1.2098      0.6290        -1.923      0.055-0.047    -0.0485     -0.0040
KQ26_CA  -0.67234      0.6445        -1.043      0.297-0.026    -0.0323     -0.0034
KQ26_CS  -0.99200      0.5323        -1.864      0.063-0.046    -0.0542     -0.0071
KQ26_CR   0.12784E-01  0.5418        0.2359E-01  0.981 0.001     0.0006      0.0001
KQ26_DA   0.29446      0.6020        0.4891      0.625 0.012     0.0145      0.0016
KQ26_DS   0.67683      0.4698         1.441      0.150 0.036     0.0415      0.0073
KQ26_DR   0.70044      0.5667         1.236      0.217 0.030     0.0309      0.0029
KQ26_EA   0.73950E-01  0.5589        0.1323      0.895 0.003     0.0042      0.0006
KQ26_ES  -0.67453E-01  0.5000       -0.1349      0.893-0.003    -0.0040     -0.0006
KQ26_ER   0.17229E-01  0.6971        0.2472E-01  0.980 0.001     0.0007      0.0001
KQ26_GA   -2.0208       1.027        -1.968      0.049-0.048    -0.0944     -0.0096
KQ26_GS   -1.6149      0.9377        -1.722      0.085-0.042    -0.0946     -0.0336
KQ26_GR   -2.0470       1.056        -1.939      0.053-0.048    -0.0756     -0.0056
KQ26_FA   -1.2208      0.7565        -1.614      0.107-0.040    -0.0567     -0.0057
KQ26_FS  -0.68260      0.6251        -1.092      0.275-0.027    -0.0425     -0.0124
KQ26_FR  -0.70750      0.7855       -0.9008      0.368-0.022    -0.0311     -0.0029
CONSTANT   29.530       3.218         9.177      0.000 0.221     0.0000      0.8805

DURBIN-WATSON = 1.9733    VON NEUMANN RATIO = 1.9744    RHO =  0.01313
RESIDUAL SUM = -0.81315E-10  RESIDUAL VARIANCE =   49.952
SUM OF ABSOLUTE ERRORS=   9489.5
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.2291
RUNS TEST:  889 RUNS,  837 POS,    0 ZERO,  897 NEG  NORMAL STATISTIC =  1.0600
COEFFICIENT OF SKEWNESS =   0.1445 WITH STANDARD DEVIATION OF 0.0588
COEFFICIENT OF EXCESS KURTOSIS =   0.0655 WITH STANDARD DEVIATION OF 0.1175

    GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
OBSERVED  1.0  0.0  0.0  1.0  2.0  2.0  6.0  6.0  5.0  9.0  8.0  8.0 10.0 24.0 17.0 21.0 28.0 39.0 41.0
3.0
        31.0 52.0 47.0 62.0 67.0 67.0 77.0 78.0 64.0 81.0 74.0 64.0 61.0 60.0 55.0 66.0 51.0 61.0 38.0
13.0
        32.0 39.0 41.0 31.0 18.0 18.0 21.0 17.0  9.0 10.0  6.0  4.0  8.0  6.0  2.0  2.0  3.0  1.0  0.0
.0

EXPECTED  3.3  1.2  1.6  2.1  2.6  3.5  4.3  5.5  6.9  8.5 10.2 12.5 15.1 17.7 20.8 24.3 27.7 31.7 35.7
19.9
        44.0 48.2 52.2 56.0 59.3 62.6 65.0 66.9 68.5 69.0 69.0 68.5 66.9 65.0 62.6 59.3 56.0 52.2 48.2
4.0
        39.9 35.7 31.7 27.7 24.3 20.8 17.7 15.1 12.5 10.2  8.5  6.9  5.5  4.3  3.5  2.6  2.1  1.6  1.2
.3

CHI-SQUARE =   57.2796 WITH-33 DEGREES OF FREEDOM
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
```

```
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =    5.0052006     WITH   57 AND 1643 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   285.29644     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.19979
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =    4.8994037     WITH    3 AND 1643 D.F.  P-VALUE= 0.00215
WALD CHI-SQUARE STATISTIC =   14.698211     WITH    3 D.F.  P-VALUE= 0.00209
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.20411
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =  0.47373912     WITH    3 AND 1643 D.F.  P-VALUE= 0.70061
WALD CHI-SQUARE STATISTIC =   1.4212174     WITH    3 D.F.  P-VALUE= 0.70057
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =    4.6441023     WITH    3 AND 1643 D.F.  P-VALUE= 0.00308
WALD CHI-SQUARE STATISTIC =   13.932307     WITH    3 D.F.  P-VALUE= 0.00300
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.21533
|_test
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
```

```
|_end
F STATISTIC =   3.1252436     WITH    3 AND 1643 D.F.  P-VALUE= 0.02496
WALD CHI-SQUARE STATISTIC =   9.3757308     WITH    3 D.F.  P-VALUE= 0.02469
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.31998
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =  0.61774626     WITH    3 AND 1643 D.F.  P-VALUE= 0.60352
WALD CHI-SQUARE STATISTIC =   1.8532388     WITH    3 D.F.  P-VALUE= 0.60342
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =   2.6142233     WITH    3 AND 1643 D.F.  P-VALUE= 0.04974
WALD CHI-SQUARE STATISTIC =   7.8426700     WITH    3 D.F.  P-VALUE= 0.04938
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.38252
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =  0.32205944     WITH    3 AND 1643 D.F.  P-VALUE= 0.80943
WALD CHI-SQUARE STATISTIC =  0.96617833     WITH    3 D.F.  P-VALUE= 0.80944
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq35l=0
|_end
F STATISTIC =   2.6908394     WITH    3 AND 1643 D.F.  P-VALUE= 0.04488
WALD CHI-SQUARE STATISTIC =   8.0725181     WITH    3 D.F.  P-VALUE= 0.04454
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.37163
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =   7.8497513     WITH    3 AND 1643 D.F.  P-VALUE= 0.00003
WALD CHI-SQUARE STATISTIC =   23.549254     WITH    3 D.F.  P-VALUE= 0.00003
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.12739
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =   4.3103135     WITH    3 AND 1643 D.F.  P-VALUE= 0.00489
WALD CHI-SQUARE STATISTIC =   12.930941     WITH    3 D.F.  P-VALUE= 0.00479
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.23200
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =  0.58736646     WITH    3 AND 1643 D.F.  P-VALUE= 0.62331
WALD CHI-SQUARE STATISTIC =   1.7620994     WITH    3 D.F.  P-VALUE= 0.62322
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
F STATISTIC =  0.62538374     WITH    3 AND 1643 D.F.  P-VALUE= 0.59861
WALD CHI-SQUARE STATISTIC =   1.8761512     WITH    3 D.F.  P-VALUE= 0.59851
```

```
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =   2.2897933     WITH    3 AND 1643 D.F.  P-VALUE= 0.07659
WALD CHI-SQUARE STATISTIC =   6.8693800     WITH    3 D.F.  P-VALUE= 0.07618
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.43672
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
F STATISTIC =   7.2479141     WITH    3 AND 1643 D.F.  P-VALUE= 0.00008
WALD CHI-SQUARE STATISTIC =   21.743742     WITH    3 D.F.  P-VALUE= 0.00007
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.13797
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   1.5093889     WITH    3 AND 1643 D.F.  P-VALUE= 0.21022
WALD CHI-SQUARE STATISTIC =   4.5281667     WITH    3 D.F.  P-VALUE= 0.20979
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.66252
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =  0.84129349     WITH    3 AND 1643 D.F.  P-VALUE= 0.47120
WALD CHI-SQUARE STATISTIC =   2.5238805     WITH    3 D.F.  P-VALUE= 0.47099
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.29471539E-01 WITH    3 AND 1643 D.F.  P-VALUE= 0.99319
WALD CHI-SQUARE STATISTIC =  0.88414617E-01 WITH    3 D.F.  P-VALUE= 0.99319
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =   1.5284731     WITH    3 AND 1643 D.F.  P-VALUE= 0.20523
WALD CHI-SQUARE STATISTIC =   4.5854193     WITH    3 D.F.  P-VALUE= 0.20480
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.65425
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =  0.87879854     WITH    3 AND 1643 D.F.  P-VALUE= 0.45137
WALD CHI-SQUARE STATISTIC =   2.6363956     WITH    3 D.F.  P-VALUE= 0.45114
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_*
|_* PERCENTAGE OF CALORIES FROM SATURATED FAT
|_*

|_ols pctsfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|    emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|    wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|    lcaldiet preglac kq2fa &
|    kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|    kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
```

```
kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR= 6146 CURRENT PAR= 7000
 OLS ESTIMATION
   1734 OBSERVATIONS      DEPENDENT VARIABLE = PCTSFAT
...NOTE..SAMPLE RANGE SET TO:     1, 1936

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =    0.2432      R-SQUARE ADJUSTED =   0.2018
VARIANCE OF THE ESTIMATE-SIGMA**2 =    9.5442
STANDARD ERROR OF THE ESTIMATE-SIGMA =    3.0894
SUM OF SQUARED ERRORS-SSE=    15681.
MEAN OF DEPENDENT VARIABLE =    12.863
LOG OF THE LIKELIHOOD FUNCTION = -4369.60

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =       10.045
   (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =    2.3070
 SCHWARZ (1978) CRITERION - LOG SC =                2.5934
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
   GENERALIZED CROSS VALIDATION - GCV =             10.073
 HANNAN AND QUINN (1979) CRITERION =                11.167
 RICE (1984) CRITERION =                            10.104
 SHIBATA (1981) CRITERION =                         9.9925
 SCHWARZ (1978) CRITERION - SC =                    13.376
 AKAIKE (1974) INFORMATION CRITERION - AIC =        10.044
```

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	5040.3	90.	56.003	5.868
ERROR	15681.	1643.	9.5442	P-VALUE
TOTAL	20721.	1733.	11.957	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	0.29196E+06	91.	3208.3	336.151
ERROR	15681.	1643.	9.5442	P-VALUE
TOTAL	0.30764E+06	1734.	177.41	0.000

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 1643 DF	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
BMI_SP	0.47810E-01	0.1552E-01	3.081	0.002	0.076	0.0734	0.0992
LFATDIET	-1.0422	0.2965	-3.515	0.000	-0.086	-0.0875	-0.0075
NE	-0.24373	0.2178	-1.119	0.263	-0.028	-0.0282	-0.0038
MW	0.39529	0.2059	1.920	0.055	0.047	0.0484	0.0072
WEST	-0.41146E-01	0.2173	-0.1894	0.850	-0.005	-0.0047	-0.0006
MSANCC	-0.93295E-01	0.1909	-0.4888	0.625	-0.012	-0.0135	-0.0034
NMSA	0.41174	0.2264	1.819	0.069	0.045	0.0525	0.0085
POVCAT2	-0.77558E-01	0.2196	-0.3531	0.724	-0.009	-0.0110	-0.0024
POVCAT3	0.15778	0.2486	0.6346	0.526	0.016	0.0219	0.0044
EMP	0.17558E-04	0.1984	0.8851E-04	1.000	0.000	0.0000	0.0000
REGEX	0.73164E-01	0.1746	0.4191	0.675	0.010	0.0106	0.0027
MODEX	-0.89117E-01	0.2447	-0.3643	0.716	-0.009	-0.0084	-0.0008
GOODH	-0.61446E-01	0.2050	-0.2998	0.764	-0.007	-0.0069	-0.0039
FSYES	-0.55425	0.3024	-1.833	0.067	-0.045	-0.0465	-0.0040
VEGEY	-0.56365	0.5048	-1.117	0.264	-0.028	-0.0259	-0.0011
WINTER	0.51152E-01	0.2174	0.2353	0.814	0.006	0.0063	0.0009
SPRING	0.11407	0.2053	0.5557	0.578	0.014	0.0140	0.0021

SUMMER	-0.74211E-01	0.2048	-0.3624	0.717-0.009	-0.0096	-0.0016
WKDYWKDY	-0.15900	0.4400	-0.3613	0.718-0.009	-0.0230	-0.0061
WKDYWKED	0.10379	0.4379	0.2370	0.813 0.006	0.0150	0.0038
AGE	0.77433E-01	0.2624E-01	2.951	0.003 0.073	0.3763	0.3239
AGE2	-0.77956E-03	0.2494E-03	-3.126	0.002-0.077	-0.4109	-0.1925
MALE	-0.10050	0.1756	-0.5725	0.567-0.014	-0.0145	-0.0040
HS	-0.66789	0.2298	-2.906	0.004-0.072	-0.0923	-0.0183
COL	-0.71215	0.2438	-2.921	0.004-0.072	-0.1021	-0.0240
NHISP	0.29683E-01	0.3388	0.8761E-01	0.930 0.002	0.0022	0.0021
BLACK	-0.19617	0.2588	-0.7580	0.449-0.019	-0.0176	-0.0016
OTHER	-0.81610	0.3787	-2.155	0.031-0.053	-0.0540	-0.0035
NVSMOKED	-0.11900	0.2017	-0.5901	0.555-0.015	-0.0172	-0.0043
SMOKEN	0.15850	0.2221	0.7137	0.476 0.018	0.0206	0.0034
LCALDIET	-0.72012	0.3788	-1.901	0.057-0.047	-0.0508	-0.0036
PREGLAC	0.76512E-01	0.6898	0.1109	0.912 0.003	0.0020	0.0000
KQ2FA	0.37124	0.2540	1.462	0.144 0.036	0.0328	0.0258
KQ27S	-0.57596	0.1878	-3.067	0.002-0.075	-0.0735	-0.0119
KQ27R	-0.77119	0.2977	-2.590	0.010-0.064	-0.0616	-0.0050
KQ27N	-0.42932	0.3297	-1.302	0.193-0.032	-0.0367	-0.0032
KQ28S	0.51896E-02	0.2095	0.2477E-01	0.980 0.001	0.0007	0.0002
KQ28R	0.14454	0.2528	0.5718	0.568 0.014	0.0163	0.0021
KQ28N	0.12414	0.2623	0.4732	0.636 0.012	0.0144	0.0020
KQ29S	-1.5237	0.5884	-2.590	0.010-0.064	-0.2006	-0.0347
KQ29R	-1.5200	0.5852	-2.597	0.009-0.064	-0.2104	-0.0419
KQ29N	-1.8353	0.5875	-3.124	0.002-0.077	-0.2500	-0.0473
KQ32L	0.21614	0.2890	0.7478	0.455 0.018	0.0312	0.0078
KQ32M	0.73125	0.3195	2.289	0.022 0.056	0.1001	0.0192
KQ32G	0.50005	0.3798	1.317	0.188 0.032	0.0421	0.0036
KQ33_A2	-0.42373E-01	0.1827	-0.2320	0.817-0.006	-0.0061	-0.0014
KQ33_A3	-0.44390E-01	0.2657	-0.1670	0.867-0.004	-0.0042	-0.0004
KQ33_A4	0.57364	0.3199	1.793	0.073 0.044	0.0437	0.0033
KQ33_B2	0.45634	0.1764	2.587	0.010 0.064	0.0639	0.0133
KQ33_B3	0.39172	0.3189	1.228	0.219 0.030	0.0297	0.0023
KQ33_B4	-0.17447	0.4781	-0.3649	0.715-0.009	-0.0089	-0.0004
KQ342	-0.74196E-01	0.2516	-0.2948	0.768-0.007	-0.0104	-0.0022
KQ343	-0.19057	0.2643	-0.7210	0.471-0.018	-0.0255	-0.0046
KQ344	0.84536E-01	0.3175	0.2663	0.790 0.007	0.0086	0.0010
KQ35S	1.5662	0.7371	2.125	0.034 0.052	0.2168	0.0432
KQ35M	1.7405	0.7420	2.346	0.019 0.058	0.2516	0.0702
KQ35L	1.8559	0.7798	2.380	0.017 0.059	0.1650	0.0152
KQ372	0.53126	0.1939	2.740	0.006 0.067	0.0737	0.0148
KQ373	0.92134	0.2247	4.100	0.000 0.101	0.1097	0.0155
KQ374	0.82732	0.2857	2.896	0.004 0.071	0.0784	0.0079
KQ30S	-0.58324	0.2551	-2.287	0.022-0.056	-0.0838	-0.0201
KQ30R	-0.54037	0.2860	-1.890	0.059-0.047	-0.0692	-0.0112
KQ30N	-1.2089	0.3169	-3.815	0.000-0.094	-0.1382	-0.0182
KQ31S	0.82189E-01	0.1967	0.4179	0.676 0.010	0.0107	0.0018
KQ31R	-0.72528E-01	0.2984	-0.2430	0.808-0.006	-0.0055	-0.0004
KQ31N	0.39432	0.2391	1.649	0.099 0.041	0.0440	0.0056
KQ36S	0.12421	0.2068	0.6007	0.548 0.015	0.0146	0.0020
KQ36R	0.36649	0.3492	1.050	0.294 0.026	0.0228	0.0014
KQ36N	-0.26975E-01	0.3547	-0.7605E-01	0.939-0.002	-0.0020	-0.0001
KQ26_AA	0.27814E-01	0.2349	0.1184	0.906 0.003	0.0033	0.0005
KQ26_AS	0.36530	0.2073	1.762	0.078 0.043	0.0507	0.0102
KQ26_AR	0.40800	0.2681	1.522	0.128 0.038	0.0396	0.0041
KQ26_BA	-0.89571	0.2075	-4.317	0.000-0.106	-0.1254	-0.0261
KQ26_BS	-0.30579	0.2565	-1.192	0.233-0.029	-0.0308	-0.0033
KQ26_BR	-0.72091	0.2748	-2.623	0.009-0.065	-0.0654	-0.0062
KQ26_CA	-0.38856	0.2708	-1.435	0.151-0.035	-0.0423	-0.0052
KQ26_CS	-0.36918	0.2346	-1.574	0.116-0.039	-0.0457	-0.0069
KQ26_CR	-0.25767E-02	0.2466	-0.1045E-01	0.992 0.000	-0.0003	0.0000
KQ26_DA	0.26033	0.2651	0.9818	0.326 0.024	0.0291	0.0037
KQ26_DS	0.29573	0.2098	1.409	0.159 0.035	0.0411	0.0083
KQ26_DR	0.36628	0.2487	1.473	0.141 0.036	0.0366	0.0039
KQ26_EA	0.13017	0.2435	0.5347	0.593 0.013	0.0170	0.0029
KQ26_ES	0.14001	0.2247	0.6232	0.533 0.015	0.0188	0.0034
KQ26_ER	0.76324E-01	0.3054	0.2499	0.803 0.006	0.0066	0.0006

```
KQ26_GA   -1.0108     0.4488      -2.252     0.024-0.055    -0.1070    -0.0125
KQ26_GS  -0.81119     0.4108      -1.975     0.048-0.049    -0.1077    -0.0440
KQ26_GR   -1.0221     0.4646      -2.200     0.028-0.054    -0.0856    -0.0073
KQ26_FA  -0.66523     0.3207      -2.074     0.038-0.051    -0.0701    -0.0081
KQ26_FS  -0.29295     0.2727      -1.074     0.283-0.026    -0.0413    -0.0139
KQ26_FR  -0.31015     0.3419     -0.9071     0.364-0.022    -0.0309    -0.0033
CONSTANT   11.234      1.404       8.002     0.000 0.194     0.0000     0.8734

DURBIN-WATSON = 1.9480    VON NEUMANN RATIO = 1.9492    RHO =  0.02577
RESIDUAL SUM = -0.10457E-10  RESIDUAL VARIANCE =   9.5442
SUM OF ABSOLUTE ERRORS=   4139.3
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.2432
RUNS TEST:  865 RUNS,  851 POS,     0 ZERO,  883 NEG  NORMAL STATISTIC = -0.1300
COEFFICIENT OF SKEWNESS =   0.2342 WITH STANDARD DEVIATION OF 0.0588
COEFFICIENT OF EXCESS KURTOSIS =   0.2209 WITH STANDARD DEVIATION OF 0.1175

    GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
OBSERVED  1.0  0.0  0.0  0.0  5.0  2.0  5.0  3.0  5.0  6.0  4.0 17.0 13.0  9.0 22.0 26.0 29.0 33.0 34.0
1.0
         43.0 60.0 53.0 67.0 72.0 65.0 61.0 75.0 68.0 64.0 79.0 68.0 70.0 59.0 63.0 59.0 58.0 51.0 47.0
7.0
         36.0 35.0 26.0 25.0 27.0 20.0 19.0 14.0  8.0  8.0  5.0  8.0  4.0  5.0  2.0  3.0  3.0  0.0  1.0
1.0

EXPECTED  3.3  1.2  1.6  2.1  2.6  3.5  4.3  5.5  6.9  8.5 10.2 12.5 15.1 17.7 20.8 24.3 27.7 31.7 35.7
9.9
         44.0 48.2 52.2 56.0 59.3 62.6 65.0 66.9 68.5 69.0 69.0 68.5 66.9 65.0 62.6 59.3 56.0 52.2 48.2
4.0
         39.9 35.7 31.7 27.7 24.3 20.8 17.7 15.1 12.5 10.2  8.5  6.9  5.5  4.3  3.5  2.6  2.1  1.6  1.2
.3

CHI-SQUARE =   62.2699 WITH-33 DEGREES OF FREEDOM
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
_test kq36s=0
```

```
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   5.2469128     WITH   57 AND 1643 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   299.07403     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.19059
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =   4.4195184     WITH    3 AND 1643 D.F.  P-VALUE= 0.00421
WALD CHI-SQUARE STATISTIC =   13.258555     WITH    3 D.F.  P-VALUE= 0.00411
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.22627
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =  0.20607984     WITH    3 AND 1643 D.F.  P-VALUE= 0.89223
WALD CHI-SQUARE STATISTIC =  0.61823951     WITH    3 D.F.  P-VALUE= 0.89224
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =   3.6816949     WITH    3 AND 1643 D.F.  P-VALUE= 0.01166
WALD CHI-SQUARE STATISTIC =   11.045085     WITH    3 D.F.  P-VALUE= 0.01148
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.27161
|_test
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_end
F STATISTIC =   3.2184305     WITH    3 AND 1643 D.F.  P-VALUE= 0.02199
WALD CHI-SQUARE STATISTIC =   9.6552915     WITH    3 D.F.  P-VALUE= 0.02174
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.31071
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =   1.4527987     WITH    3 AND 1643 D.F.  P-VALUE= 0.22569
WALD CHI-SQUARE STATISTIC =   4.3583961     WITH    3 D.F.  P-VALUE= 0.22527
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.68833
```

```
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =    2.6228416      WITH    3 AND 1643 D.F.   P-VALUE= 0.04917
WALD CHI-SQUARE STATISTIC =    7.8685248      WITH    3 D.F.   P-VALUE= 0.04881
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.38127
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =  0.55292064      WITH    3 AND 1643 D.F.   P-VALUE= 0.64622
WALD CHI-SQUARE STATISTIC =    1.6587619      WITH    3 D.F.   P-VALUE= 0.64614
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq35l=0
|_end
F STATISTIC =    2.0930211      WITH    3 AND 1643 D.F.   P-VALUE= 0.09923
WALD CHI-SQUARE STATISTIC =    6.2790632      WITH    3 D.F.   P-VALUE= 0.09880
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.47778
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =    6.1595865      WITH    3 AND 1643 D.F.   P-VALUE= 0.00037
WALD CHI-SQUARE STATISTIC =    18.478760      WITH    3 D.F.   P-VALUE= 0.00035
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.16235
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =    5.2006483      WITH    3 AND 1643 D.F.   P-VALUE= 0.00141
WALD CHI-SQUARE STATISTIC =    15.601945      WITH    3 D.F.   P-VALUE= 0.00137
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.19228
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =    1.1250065      WITH    3 AND 1643 D.F.   P-VALUE= 0.33767
WALD CHI-SQUARE STATISTIC =    3.3750196      WITH    3 D.F.   P-VALUE= 0.33734
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.88888
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
F STATISTIC =  0.44356500      WITH    3 AND 1643 D.F.   P-VALUE= 0.72189
WALD CHI-SQUARE STATISTIC =    1.3306950      WITH    3 D.F.   P-VALUE= 0.72186
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =    1.6385870      WITH    3 AND 1643 D.F.   P-VALUE= 0.17851
WALD CHI-SQUARE STATISTIC =    4.9157611      WITH    3 D.F.   P-VALUE= 0.17807
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.61028
|_test
|_test kq26_ba=0
|_test kq26_bs=0
```

0.45432E-01	-0.18243	-0.44073	-0.27885	0.95932E-02	-0.76717E-01
-0.64730E-01	-0.50661	-0.25223	-0.47785E-01	0.21726	0.16502
0.30306	0.94941E-01	0.88170E-02	-0.48846E-04	0.18363	-0.91753E-02
0.30294	0.14063	0.25626	1.1514	0.20339	-0.16920
0.31254	-0.41402	-0.46364	0.30695E-01	-0.37570E-02	0.38582
0.32077	0.20056	0.35676	-0.33304	-0.19039	-0.27692
0.23275	0.35811	0.32156	-0.16753	-0.19070	-0.31401
0.40291E-02	0.43432	0.72337	-0.10236	-0.46230	-0.16679
-1.4372	-1.6520	-1.4950	-0.28586	-0.63926	-0.64201
-0.74441E-01	-0.68347E-01	0.20196	0.10988	0.21300	-0.62480E-01
-0.92632E-01	-0.43777	-1.1383	0.16683	0.19448	0.19514E-01
0.18670	-0.28914	-0.22139	0.75127	0.39052	0.70225E-01
0.26778	0.21630E-02	0.20405	0.44942E-01	0.16431	-0.15034
0.39952	0.56552E-02	0.87865E-02	-0.17865	-0.12069	0.13536E-01
0.22613					

VARIABLE NAME	ESTIMATED COEFFICIENT	ASYMPTOTIC STANDARD ERROR	T-RATIO	ELASTICITY AT MEANS	WEIGHTED AGGREGATE ELASTICITY
BMI_SP	-0.34877E-02	0.12504E-01	-0.27893	-0.64237E-01	-0.43929E-01
LFATDIET	0.54694	0.20315	2.6923	0.38370E-01	0.29861E-01
NE	0.28687	0.17986	1.5950	0.39381E-01	0.28806E-01
MW	0.17161	0.16192	1.0598	0.32848E-01	0.22379E-01
WEST	0.38693	0.17759	2.1788	0.52614E-01	0.39247E-01
MSANCC	0.26611	0.14815	1.7962	0.76521E-01	0.54509E-01
NMSA	0.45432E-01	0.17251	0.26337	0.83224E-02	0.53236E-02
POVCAT2	-0.18243	0.17233	-1.0586	-0.50167E-01	-0.34361E-01
POVCAT3	-0.44073	0.19462	-2.2646	-0.10306	-0.72402E-01
EMP	-0.27885	0.15880	-1.7560	-0.11448	-0.76889E-01
REGEX	0.95932E-02	0.14328	0.66955E-01	0.32446E-02	0.22888E-02
MODEX	-0.76717E-01	0.20506	-0.37412	-0.67774E-02	-0.46316E-02
GOODH	-0.64730E-01	0.17341	-0.37328	-0.37282E-01	-0.25649E-01
FSYES	-0.50661	0.24274	-2.0871	-0.40148E-01	-0.22748E-01
VEGEY	-0.25223	0.35884	-0.70291	-0.53522E-02	-0.41160E-02
WINTER	-0.47785E-01	0.17743	-0.26932	-0.74704E-02	-0.49857E-02
SPRING	0.21726	0.17110	1.2698	0.36882E-01	0.26427E-01
SUMMER	0.16502	0.16745	0.98549	0.31730E-01	0.21930E-01
WKDYWKDY	0.30306	0.35947	0.84309	0.10158	0.71027E-01
WKDYWKED	0.94941E-01	0.35961	0.26401	0.32357E-01	0.21882E-01
AGE	0.88170E-02	0.22617E-01	0.38984	0.30365	0.21074
AGE2	-0.48846E-04	0.22009E-03	-0.22193	-0.93095E-01	-0.65190E-01
MALE	0.18363	0.14132	1.2994	0.62583E-01	0.41512E-01
HS	-0.91753E-02	0.17932	-0.51168E-01	-0.22728E-02	-0.14235E-02
COL	0.30294	0.18889	1.6037	0.88814E-01	0.66669E-01
NHISP	0.14063	0.24317	0.57832	0.89949E-01	0.61489E-01
BLACK	0.25626	0.21481	1.1929	0.21307E-01	0.13634E-01
OTHER	1.1514	0.27275	4.2216	0.47869E-01	0.38374E-01
NVSMOKED	0.20339	0.16438	1.2373	0.66059E-01	0.48058E-01
SMOKEN	-0.16920	0.18304	-0.92435	-0.33119E-01	-0.22836E-01
LCALDIET	0.31254	0.24070	1.2985	0.15294E-01	0.11671E-01
PREGLAC	-0.41402	0.82181	-0.50379	-0.21515E-02	-0.10767E-02
KQ2FA	-0.46364	0.20185	-2.2970	-0.29033	-0.19849
KQ27S	0.30695E-01	0.15006	0.20456	0.56361E-02	0.41072E-02
KQ27R	-0.37570E-02	0.22841	-0.16449E-01	-0.22453E-03	-0.17402E-03
KQ27N	0.38582	0.25271	1.5267	0.24728E-01	0.18626E-01
KQ28S	0.32077	0.17927	1.7893	0.90153E-01	0.63239E-01
KQ28R	0.20056	0.21657	0.92607	0.25969E-01	0.19133E-01
KQ28N	0.35676	0.22466	1.5880	0.47894E-01	0.35333E-01
KQ29S	-0.33304	0.43504	-0.76553	-0.73266E-01	-0.45680E-01
KQ29R	-0.19039	0.43916	-0.43354	-0.45018E-01	-0.32280E-01
KQ29N	-0.27692	0.43894	-0.63090	-0.62600E-01	-0.44812E-01
KQ32L	0.23275	0.21681	1.0735	0.70152E-01	0.50277E-01
KQ32M	0.35811	0.23447	1.5273	0.85138E-01	0.57416E-01
KQ32G	0.32156	0.29474	1.0910	0.25762E-01	0.14824E-01
KQ33_A2	-0.16753	0.14153	-1.1837	-0.49986E-01	-0.33849E-01

KQ33_A3	-0.19070	0.21587	-0.88341	-0.15939E-01	-0.10014E-01
KQ33_A4	-0.31401	0.27020	-1.1621	-0.16046E-01	-0.10052E-01
KQ33_B2	0.40291E-02	0.14247	0.28279E-01	0.10696E-02	0.68661E-03
KQ33_B3	0.43432	0.26508	1.6384	0.20877E-01	0.13836E-01
KQ33_B4	0.72337	0.32761	2.2081	0.23808E-01	0.15731E-01
KQ342	-0.10236	0.18485	-0.55374	-0.27083E-01	-0.20075E-01
KQ343	-0.46230	0.20646	-2.2391	-0.93693E-01	-0.57469E-01
KQ344	-0.16679	0.25011	-0.66688	-0.18852E-01	-0.11209E-01
KQ35S	-1.4372	0.51851	-2.7718	-0.33048	-0.24802
KQ35M	-1.6520	0.52360	-3.1550	-0.61596	-0.40640
KQ35L	-1.4950	0.54658	-2.7353	-0.11330	-0.67842E-01
KQ372	-0.28586	0.14332	-1.9946	-0.71058E-01	-0.50797E-01
KQ373	-0.63926	0.18096	-3.5325	-0.90248E-01	-0.54963E-01
KQ374	-0.64201	0.24616	-2.6081	-0.51157E-01	-0.26148E-01
KQ30S	-0.74441E-01	0.25384	-0.29326	-0.23082E-01	-0.14737E-01
KQ30R	-0.68347E-01	0.27302	-0.25034	-0.13526E-01	-0.10128E-01
KQ30N	0.20196	0.28840	0.70029	0.25888E-01	0.19949E-01
KQ31S	0.10988	0.15342	0.71621	0.20414E-01	0.14197E-01
KQ31R	0.21300	0.24894	0.85564	0.11715E-01	0.77948E-02
KQ31N	-0.62480E-01	0.19329	-0.32324	-0.83877E-02	-0.48580E-02
KQ36S	-0.92632E-01	0.16321	-0.56755	-0.12997E-01	-0.84148E-02
KQ36R	-0.43777	0.37904	-1.1549	-0.98580E-02	-0.56473E-02
KQ36N	-1.1383	0.33317	-3.4166	-0.77393E-01	-0.37148E-01
KQ26_AA	0.16683	0.19296	0.86460	0.24492E-01	0.18667E-01
KQ26_AS	0.19448	0.17494	1.1117	0.49521E-01	0.35128E-01
KQ26_AR	0.19514E-01	0.21941	0.88941E-01	0.20028E-02	0.12559E-02
KQ26_BA	0.18670	0.16820	1.1100	0.42609E-01	0.33907E-01
KQ26_BS	-0.28914	0.20374	-1.4192	-0.30051E-01	-0.19425E-01
KQ26_BR	-0.22139	0.22483	-0.98470	-0.18887E-01	-0.11733E-01
KQ26_CA	0.75127	0.22537	3.3335	0.75479E-01	0.58995E-01
KQ26_CS	0.39052	0.17927	2.1783	0.72889E-01	0.56850E-01
KQ26_CR	0.70225E-01	0.20555	0.34164	0.86064E-02	0.54952E-02
KQ26_DA	0.26778	0.20835	1.2852	0.32586E-01	0.24937E-01
KQ26_DS	0.21630E-02	0.17113	0.12639E-01	0.55920E-03	0.39687E-03
KQ26_DR	0.20405	0.22111	0.92285	0.20147E-01	0.13095E-01
KQ26_EA	0.44942E-01	0.20470	0.21955	0.81158E-02	0.62562E-02
KQ26_ES	0.16431	0.18575	0.88458	0.37144E-01	0.27145E-01
KQ26_ER	-0.15034	0.25144	-0.59790	-0.11588E-01	-0.69083E-02
KQ26_GA	0.39952	0.32436	1.2317	0.51211E-01	0.39366E-01
KQ26_GS	0.56552E-02	0.30327	0.18648E-01	0.26400E-02	0.18027E-02
KQ26_GR	0.87865E-02	0.35983	0.24419E-01	0.56695E-03	0.33381E-03
KQ26_FA	-0.17865	0.26329	-0.67854	-0.20347E-01	-0.15213E-01
KQ26_FS	-0.12069	0.23187	-0.52049	-0.50540E-01	-0.34382E-01
KQ26_FR	0.13536E-01	0.27059	0.50024E-01	0.13834E-02	0.91867E-03
CONSTANT	0.22613	1.0777	0.20982	0.15786	0.10834

LOG-LIKELIHOOD FUNCTION = -873.87
LOG-LIKELIHOOD(0) = -1026.5
LIKELIHOOD RATIO TEST = 305.309 WITH 90 D.F.

MADDALA R-SQUARE 0.1725
CRAGG-UHLER R-SQUARE 0.23958
MCFADDEN R-SQUARE 0.14871
ADJUSTED FOR DEGREES OF FREEDOM 0.98338E-01
APPROXIMATELY F-DISTRIBUTED 0.17663 WITH 90 AND 91 D.F.
CHOW R-SQUARE 0.18195

PREDICTION SUCCESS TABLE

		ACTUAL	
		0	1
PREDICTED	0	959.	322.
	1	115.	216.

NUMBER OF RIGHT PREDICTIONS = 0.118E+04
PERCENTAGE OF RIGHT PREDICTIONS = 0.72891

```
|_test kq26_br=0
|_end
F STATISTIC =   6.9974529     WITH    3 AND 1643 D.F.  P-VALUE= 0.00011
WALD CHI-SQUARE STATISTIC =   20.992359     WITH    3 D.F.  P-VALUE= 0.00011
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.14291
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   1.3361602     WITH    3 AND 1643 D.F.  P-VALUE= 0.26094
WALD CHI-SQUARE STATISTIC =   4.0084805     WITH    3 D.F.  P-VALUE= 0.26055
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.74841
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =  0.91282177     WITH    3 AND 1643 D.F.  P-VALUE= 0.43397
WALD CHI-SQUARE STATISTIC =   2.7384653     WITH    3 D.F.  P-VALUE= 0.43373
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.14705389     WITH    3 AND 1643 D.F.  P-VALUE= 0.93160
WALD CHI-SQUARE STATISTIC =  0.44116166     WITH    3 D.F.  P-VALUE= 0.93161
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =   1.9729511     WITH    3 AND 1643 D.F.  P-VALUE= 0.11607
WALD CHI-SQUARE STATISTIC =   5.9188534     WITH    3 D.F.  P-VALUE= 0.11563
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.50685
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   1.6070289     WITH    3 AND 1643 D.F.  P-VALUE= 0.18582
WALD CHI-SQUARE STATISTIC =   4.8210868     WITH    3 D.F.  P-VALUE= 0.18538
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.62227
|_*
|_* DIETARY GUIDELINE FOR FAT
|_*

|_logit fatdgy bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|    emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|    wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|    lcaldiet preglac kq2fa &
|    kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|    kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|    kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|    kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|    kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|    kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|    kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|    kq26_fa kq26_fs kq26_fr / rstat iter=100

REQUIRED MEMORY IS PAR= 4952 CURRENT PAR= 7000
FOR MAXIMUM EFFICIENCY USE AT LEAST PAR=  6199
 LOGIT ANALYSIS     DEPENDENT VARIABLE =FATDGY   CHOICES =  2
    1734. TOTAL OBSERVATIONS
     581. OBSERVATIONS AT ONE
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   1153. OBSERVATIONS AT ZERO
 100 MAXIMUM ITERATIONS
CONVERGENCE TOLERANCE =0.00100

LOG OF LIKELIHOOD WITH CONSTANT TERM ONLY =     -1105.8
BINOMIAL  ESTIMATE = 0.3351
ITERATION  0       LOG OF LIKELIHOOD FUNCTION =   -1105.8

ITERATION  1 ESTIMATES
-0.18507E-01 0.27414     -0.65350E-01-0.29750     0.36842E-01-0.20098
-0.24207     -0.66793E-02-0.22119     -0.17048     0.34398E-01-0.51319E-01
 0.12092      0.19685     0.20857      0.16670E-01-0.10948      0.83315E-01
 0.36584E-01-0.20941     -0.30808E-01 0.29456E-03 0.11857      0.23089
 0.24157     -0.52414E-01-0.57746E-01 0.24746     -0.35778E-01-0.87718E-01
 0.51127      0.26295     -0.36795     0.29540      0.58465      0.34210
-0.14525     -0.91524E-01-0.25760      0.54424      0.60778      0.88089
-0.20385     -0.36669     -0.19183     0.67266E-01 0.13297     -0.29040
-0.93526E-01 0.81866E-01 0.48452     -0.40084E-01-0.21067E-01-0.26759E-01
 -1.0360     -1.0027      -1.0764     -0.41344     -0.52670     -0.62716
 0.18482      0.12464      0.45776     -0.15395     -0.52315E-03-0.24517
 0.84175E-01-0.38512     -0.15556      0.96237E-02-0.18715     -0.13889
 0.46065      0.29996E-01-0.55660E-01 0.28496      0.40872      0.18578
 0.83034E-01-0.49855E-01-0.16216     -0.12545     -0.72358E-01-0.13476
 0.37679      0.29290      0.28655      0.16828      0.49242E-01 0.79600E-01
  1.2507
ITERATION  1       LOG OF LIKELIHOOD FUNCTION =    -955.28

ITERATION  2 ESTIMATES
-0.22899E-01 0.27553     -0.79849E-01-0.37089     0.41136E-01-0.21843
-0.27423     -0.73173E-02-0.27407     -0.20435     0.26671E-01-0.41993E-01
 0.14635      0.24273      0.24794      0.17621E-01-0.13138      0.11004
 0.25037E-01-0.26596     -0.36209E-01 0.34610E-03 0.15040      0.26959
 0.27516     -0.30724E-01-0.58638E-01 0.29327     -0.59460E-01-0.11392
 0.56615      0.27793     -0.43513      0.35880      0.65349      0.39568
-0.19133     -0.14160     -0.33287      0.82461      0.90936       1.1989
-0.20951     -0.41241     -0.20075      0.65715E-01 0.14633     -0.40216
-0.12061      0.78940E-01 0.56476     -0.16316E-01 0.14446E-01-0.14711E-01
 -1.2333     -1.1893      -1.3316      -0.45252     -0.56910     -0.74748
 0.24905      0.18737      0.51704     -0.18782      0.16240E-01-0.29377
 0.98861E-01-0.55271     -0.23563      0.11799E-01-0.20810     -0.13861
 0.52265      0.34877E-01-0.90424E-01 0.33482      0.47681      0.22729
 0.49593E-01-0.67140E-01-0.22527     -0.14824     -0.82964E-01-0.22366
 0.44042      0.34449      0.33460      0.20720      0.92328E-01 0.12583
  1.3000
ITERATION  2       LOG OF LIKELIHOOD FUNCTION =    -950.69

ITERATION  3 ESTIMATES
-0.23371E-01 0.27566     -0.81681E-01-0.37876     0.41005E-01-0.21982
-0.27817     -0.67953E-02-0.27875     -0.20767     0.25433E-01-0.40742E-01
 0.14929      0.24814      0.25627      0.18090E-01-0.13417      0.11322
 0.25450E-01-0.27012     -0.36742E-01 0.35116E-03 0.15337      0.27301
 0.27798     -0.28241E-01-0.57551E-01 0.29795     -0.62088E-01-0.11718
 0.57251      0.27882     -0.44234      0.36505      0.66167      0.40189
-0.19661     -0.14751     -0.34166      0.87409      0.96137       1.2518
-0.21118     -0.41832     -0.20398      0.66081E-01 0.14718     -0.41606
-0.12307      0.77582E-01 0.57447     -0.13991E-01 0.18017E-01-0.15054E-01
 -1.2504     -1.2048      -1.3578      -0.45635     -0.57244     -0.76350
 0.25824      0.19646      0.52678     -0.19103      0.18716E-01-0.30007
 0.99950E-01-0.57599     -0.24659      0.12053E-01-0.21016     -0.13704
 0.52827      0.34071E-01-0.95425E-01 0.33955      0.48286      0.23199
 0.45977E-01-0.68989E-01-0.23336     -0.15041     -0.83701E-01-0.23530
 0.44667      0.34909      0.33921      0.21216      0.97601E-01 0.13098
  1.2828
ITERATION  3       LOG OF LIKELIHOOD FUNCTION =    -950.65

ITERATION  4 ESTIMATES
-0.23376E-01 0.27566     -0.81705E-01-0.37884     0.40995E-01-0.21983
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-0.27822     -0.67803E-02-0.27879     -0.20770      0.25415E-01-0.40731E-01
 0.14932      0.24821      0.25641      0.18097E-01-0.13421      0.11326
 0.25472E-01-0.27015     -0.36748E-01 0.35122E-03 0.15340      0.27304
 0.27800     -0.28213E-01-0.57533E-01 0.29799     -0.62111E-01-0.11722
 0.57259      0.27881     -0.44242      0.36511      0.66176      0.40196
-0.19667     -0.14758     -0.34175      0.87506      0.96236      1.2528
-0.21121     -0.41839     -0.20404      0.66090E-01 0.14718     -0.41622
-0.12309      0.77563E-01 0.57459     -0.13965E-01 0.18053E-01-0.15077E-01
 -1.2506     -1.2049      -1.3581     -0.45639     -0.57247     -0.76371
 0.25836      0.19659      0.52692     -0.19106      0.18754E-01-0.30015
 0.99954E-01-0.57630     -0.24675      0.12056E-01-0.21018     -0.13700
 0.52832      0.34044E-01-0.95486E-01 0.33960      0.48291      0.23204
 0.45936E-01-0.69008E-01-0.23345     -0.15044     -0.83710E-01-0.23544
 0.44674      0.34913      0.33926      0.21223      0.97664E-01 0.13104
 1.2822
```

VARIABLE NAME	ESTIMATED COEFFICIENT	ASYMPTOTIC STANDARD ERROR	T-RATIO	ELASTICITY AT MEANS	WEIGHTED AGGREGATE ELASTICITY
BMI_SP	-0.23376E-01	0.12154E-01	-1.9233	-0.43294	-0.30586
LFATDIET	0.27566	0.20469	1.3467	0.17767E-01	0.14140E-01
NE	-0.81705E-01	0.16807	-0.48615	-0.11317E-01	-0.85329E-02
MW	-0.37884	0.16084	-2.3553	-0.61420E-01	-0.39954E-01
WEST	0.40995E-01	0.17104	0.23968	0.53991E-02	0.40834E-02
MSANCC	-0.21983	0.14343	-1.5327	-0.71018E-01	-0.50837E-01
NMSA	-0.27822	0.17208	-1.6168	-0.51121E-01	-0.33501E-01
POVCAT2	-0.67803E-02	0.17206	-0.39407E-01	-0.18728E-02	-0.13682E-02
POVCAT3	-0.27879	0.20192	-1.3807	-0.69528E-01	-0.48286E-01
EMP	-0.20770	0.14999	-1.3848	-0.79985E-01	-0.53836E-01
REGEX	0.25415E-01	0.13416	0.18943	0.82308E-02	0.59645E-02
MODEX	-0.40731E-01	0.19565	-0.20818	-0.33915E-02	-0.23753E-02
GOODH	0.14932	0.16217	0.92076	0.84524E-01	0.60522E-01
FSYES	0.24821	0.22964	1.0809	0.15997E-01	0.11909E-01
VEGEY	0.25641	0.37663	0.68080	0.46191E-02	0.36312E-02
WINTER	0.18097E-01	0.16609	0.10896	0.29558E-02	0.21395E-02
SPRING	-0.13421	0.16804	-0.79864	-0.22081E-01	-0.14975E-01
SUMMER	0.11326	0.15925	0.71121	0.21581E-01	0.16101E-01
WKDYWKDY	0.25472E-01	0.35880	0.70994E-01	0.87694E-02	0.65479E-02
WKDYWKED	-0.27015	0.36007	-0.75026	-0.89111E-01	-0.60689E-01
AGE	-0.36748E-01	0.21528E-01	-1.7070	-1.3723	-0.98937
AGE2	0.35122E-03	0.20089E-03	1.7483	0.77445	0.56503
MALE	0.15340	0.13231	1.1593	0.54468E-01	0.37307E-01
HS	0.27304	0.17581	1.5531	0.66784E-01	0.47021E-01
COL	0.27800	0.18975	1.4651	0.83801E-01	0.60971E-01
NHISP	-0.28213E-01	0.24659	-0.11441	-0.18161E-01	-0.12876E-01
BLACK	-0.57533E-01	0.20932	-0.27485	-0.43069E-02	-0.30330E-02
OTHER	0.29799	0.27809	1.0716	0.11452E-01	0.91618E-02
NVSMOKED	-0.62111E-01	0.15193	-0.40880	-0.19916E-01	-0.14708E-01
SMOKEN	-0.11722	0.16997	-0.68965	-0.22711E-01	-0.16103E-01
LCALDIET	0.57259	0.23562	2.4301	0.25214E-01	0.19912E-01
PREGLAC	0.27881	0.62364	0.44707	0.15626E-02	0.12476E-02
KQ2FA	-0.44242	0.19284	-2.2943	-0.27505	-0.19540
KQ27S	0.36511	0.14543	2.5105	0.67087E-01	0.51970E-01
KQ27R	0.66176	0.21727	3.0458	0.38148E-01	0.31986E-01
KQ27N	0.40196	0.23321	1.7236	0.27033E-01	0.21636E-01
KQ28S	-0.19667	0.16553	-1.1881	-0.52591E-01	-0.35896E-01
KQ28R	-0.14758	0.19909	-0.74126	-0.19082E-01	-0.14666E-01
KQ28N	-0.34175	0.20705	-1.6506	-0.48020E-01	-0.36206E-01
KQ29S	0.87506	0.51398	1.7025	0.17795	0.11509
KQ29R	0.96236	0.51287	1.8764	0.23693	0.16982
KQ29N	1.2528	0.51365	2.4391	0.28838	0.22593
KQ32L	-0.21121	0.20245	-1.0433	-0.67895E-01	-0.52342E-01
KQ32M	-0.41839	0.22508	-1.8589	-0.98148E-01	-0.62570E-01
KQ32G	-0.20404	0.28842	-0.70743	-0.13232E-01	-0.81441E-02
KQ33_A2	0.66090E-01	0.13725	0.48153	0.19578E-01	0.13516E-01

KQ33_A3	0.14718	0.20206	0.72841	0.12255E-01	0.88027E-02
KQ33_A4	-0.41622	0.26850	-1.5502	-0.21661E-01	-0.12455E-01
KQ33_B2	-0.12309	0.13752	-0.89505	-0.32078E-01	-0.21397E-01
KQ33_B3	0.77563E-01	0.25138	0.30855	0.40054E-02	0.25036E-02
KQ33_B4	0.57459	0.34316	1.6744	0.12881E-01	0.98988E-02
KQ342	-0.13965E-01	0.18475	-0.75591E-01	-0.37233E-02	-0.27518E-02
KQ343	0.18053E-01	0.20173	0.89488E-01	0.38952E-02	0.26979E-02
KQ344	-0.15077E-01	0.24588	-0.61317E-01	-0.15210E-02	-0.93235E-03
KQ35S	-1.2506	0.54816	-2.2815	-0.30790	-0.24129
KQ35M	-1.2049	0.55379	-2.1758	-0.43364	-0.30265
KQ35L	-1.3581	0.58949	-2.3039	-0.99492E-01	-0.55771E-01
KQ372	-0.45639	0.13938	-3.2743	-0.11346	-0.81419E-01
KQ373	-0.57247	0.17077	-3.3523	-0.85937E-01	-0.54847E-01
KQ374	-0.76371	0.22121	-3.4525	-0.64813E-01	-0.37291E-01
KQ30S	0.25836	0.23236	1.1119	0.79432E-01	0.54688E-01
KQ30R	0.19659	0.24967	0.78740	0.36515E-01	0.26927E-01
KQ30N	0.52692	0.26195	2.0115	0.70874E-01	0.57600E-01
KQ31S	-0.19106	0.15050	-1.2695	-0.37248E-01	-0.25287E-01
KQ31R	0.18754E-01	0.24169	0.77594E-01	0.97598E-03	0.65990E-03
KQ31N	-0.30015	0.18854	-1.5920	-0.37969E-01	-0.22724E-01
KQ36S	0.99954E-01	0.15770	0.63384	0.14445E-01	0.98836E-02
KQ36R	-0.57630	0.31928	-1.8050	-0.19379E-01	-0.10306E-01
KQ36N	-0.24675	0.30677	-0.80434	-0.12150E-01	-0.73643E-02
KQ26_AA	0.12056E-01	0.17941	0.67201E-01	0.18292E-02	0.14669E-02
KQ26_AS	-0.21018	0.16233	-1.2948	-0.52587E-01	-0.36552E-01
KQ26_AR	-0.13700	0.21094	-0.64950	-0.12285E-01	-0.79164E-02
KQ26_BA	0.52832	0.15417	3.4268	0.13726	0.11196
KQ26_BS	0.34044E-01	0.20323	0.16751	0.33253E-02	0.23357E-02
KQ26_BR	-0.95486E-01	0.22884	-0.41725	-0.73391E-02	-0.44101E-02
KQ26_CA	0.33960	0.19988	1.6990	0.40240E-01	0.32771E-01
KQ26_CS	0.48291	0.17372	2.7799	0.81000E-01	0.63225E-01
KQ26_CR	0.23204	0.19337	1.2000	0.28052E-01	0.18484E-01
KQ26_DA	0.45936E-01	0.19288	0.23816	0.58477E-02	0.46935E-02
KQ26_DS	-0.69008E-01	0.16070	-0.42942	-0.17321E-01	-0.12468E-01
KQ26_DR	-0.23345	0.21049	-1.1091	-0.22429E-01	-0.14705E-01
KQ26_EA	-0.15044	0.18426	-0.81645	-0.29510E-01	-0.23405E-01
KQ26_ES	-0.83710E-01	0.17628	-0.47487	-0.18096E-01	-0.12891E-01
KQ26_ER	-0.23544	0.25136	-0.93664	-0.16117E-01	-0.96619E-02
KQ26_GA	0.44674	0.32667	1.3676	0.49359E-01	0.38825E-01
KQ26_GS	0.34913	0.29874	1.1687	0.16925	0.11994
KQ26_GR	0.33926	0.34740	0.97655	0.21729E-01	0.14138E-01
KQ26_FA	0.21223	0.25383	0.83611	0.23193E-01	0.18176E-01
KQ26_FS	0.97664E-01	0.21994	0.44405	0.41364E-01	0.29417E-01
KQ26_FR	0.13104	0.26371	0.49691	0.12537E-01	0.85144E-02
CONSTANT	1.2822	1.1537	1.1114	0.89003	0.63480

```
LOG-LIKELIHOOD FUNCTION =  -950.65
LOG-LIKELIHOOD(0)   =   -1105.8
LIKELIHOOD RATIO TEST  =     310.265    WITH    90  D.F.

MADDALA R-SQUARE            0.1638
CRAGG-UHLER R-SQUARE        0.22733
MCFADDEN R-SQUARE           0.14029
    ADJUSTED FOR DEGREES OF FREEDOM        0.93199E-01
    APPROXIMATELY F-DISTRIBUTED    0.16500      WITH       90  AND    91  D.F.
CHOW R-SQUARE               0.17371

        PREDICTION SUCCESS TABLE
                     ACTUAL
               0             1

        0   1023.          345.
PREDICTED 1    130.          236.

NUMBER OF RIGHT PREDICTIONS =        0.126E+04
PERCENTAGE OF RIGHT PREDICTIONS =     0.72607
```

```
EXPECTED OBSERVATIONS AT 0  =        1088.2   OBSERVED =   1153.0
EXPECTED OBSERVATIONS AT 1  =         645.8   OBSERVED =    581.0
SUM OF SQUARED "RESIDUALS" =            319.22
WEIGHTED SUM OF SQUARED "RESIDUALS" =     1794.9

HENSHER-JOHNSON PREDICTION SUCCESS TABLE
                                            OBSERVED    OBSERVED
                   PREDICTED  CHOICE          COUNT       SHARE
       ACTUAL          0          1
         0          833.523    319.477   1153.000      0.665
         1          319.477    261.523    581.000      0.335

PREDICTED COUNT      1153.000    581.000   1734.000      1.000
PREDICTED SHARE         0.665      0.335      1.000
PROP. SUCCESSFUL        0.723      0.450      0.632
SUCCESS INDEX           0.058      0.115      0.077
PROPORTIONAL ERROR      0.000      0.000
NORMALIZED SUCCESS INDEX                      0.173

DURBIN-WATSON = 1.9969    VON NEUMANN RATIO = 1.9980    RHO =  0.00134
RESIDUAL SUM = -0.39447E-05  RESIDUAL VARIANCE =  0.18409
SUM OF ABSOLUTE ERRORS=   638.95
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.1737
LOG-LIKELIHOOD FUNCTION =   -950.6510
RUNS TEST:  753 RUNS,  581 POS,    0 ZERO, 1153 NEG  NORMAL STATISTIC = -1.1136
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq35l=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
```

```
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =   158.66431     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.35925
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
WALD CHI-SQUARE STATISTIC =   12.162668     WITH    3 D.F.  P-VALUE= 0.00685
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24666
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
WALD CHI-SQUARE STATISTIC =   2.9883542     WITH    3 D.F.  P-VALUE= 0.39342
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
WALD CHI-SQUARE STATISTIC =   10.149920     WITH    3 D.F.  P-VALUE= 0.01733
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.29557
|_test
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_end
WALD CHI-SQUARE STATISTIC =   4.0777748     WITH    3 D.F.  P-VALUE= 0.25319
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.73570
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
WALD CHI-SQUARE STATISTIC =   4.0593555     WITH    3 D.F.  P-VALUE= 0.25513
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.73903
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
WALD CHI-SQUARE STATISTIC =   4.6845151     WITH    3 D.F.  P-VALUE= 0.19641
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.64041
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
```

```
WALD CHI-SQUARE STATISTIC =  0.59592101E-01 WITH    3 D.F.   P-VALUE= 0.99620
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_end
WALD CHI-SQUARE STATISTIC =    5.7045294     WITH    3 D.F.   P-VALUE= 0.12690
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.52590
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
WALD CHI-SQUARE STATISTIC =    19.433834     WITH    3 D.F.   P-VALUE= 0.00022
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.15437
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
WALD CHI-SQUARE STATISTIC =    5.4613038     WITH    3 D.F.   P-VALUE= 0.14097
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.54932
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
WALD CHI-SQUARE STATISTIC =    3.6272845     WITH    3 D.F.   P-VALUE= 0.30463
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.82706
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
WALD CHI-SQUARE STATISTIC =    4.7325295     WITH    3 D.F.   P-VALUE= 0.19246
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.63391
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
WALD CHI-SQUARE STATISTIC =    2.5308979     WITH    3 D.F.   P-VALUE= 0.46973
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
WALD CHI-SQUARE STATISTIC =    16.734530     WITH    3 D.F.   P-VALUE= 0.00080
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.17927
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
WALD CHI-SQUARE STATISTIC =    7.9102525     WITH    3 D.F.   P-VALUE= 0.04790
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.37925
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
WALD CHI-SQUARE STATISTIC =    1.7796551     WITH    3 D.F.   P-VALUE= 0.61937
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ea=0
```

```
|_test kq26_es=0
|_test kq26_er=0
|_end
WALD CHI-SQUARE STATISTIC =   1.1938527     WITH    3 D.F.  P-VALUE= 0.75448
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
WALD CHI-SQUARE STATISTIC =   1.8717161     WITH    3 D.F.  P-VALUE= 0.59945
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =  0.80619548     WITH    3 D.F.  P-VALUE= 0.84798
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_*
|_stop
```

Appendix F.

Regression Runs in the Consideration of All Avoidance, Modification, Substitution, and Replacement Questions Simultaneously for 1996.

Percentage of Calories from Total Fat
Percentage of Calories from Saturated Fat
Dietary Guideline for Fat

```
|_*
|_* PERCENTAGE OF CALORIES FROM TOTAL FAT
|_*
|_

|_ols pctfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
     lcaldiet preglac kq2fa &
     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
     kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR= 5959 CURRENT PAR= 7000
 OLS ESTIMATION
    1680 OBSERVATIONS     DEPENDENT VARIABLE = PCTFAT
...NOTE..SAMPLE RANGE SET TO:    1, 1877

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =    0.2147     R-SQUARE ADJUSTED =   0.1702
VARIANCE OF THE ESTIMATE-SIGMA**2 =   54.187
STANDARD ERROR OF THE ESTIMATE-SIGMA =   7.3612
SUM OF SQUARED ERRORS-SSE=   86103.
MEAN OF DEPENDENT VARIABLE =   33.239
LOG OF THE LIKELIHOOD FUNCTION = -5690.69

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =       57.122
   (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =   4.0451
 SCHWARZ (1978) CRITERION - LOG SC =               4.3390
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
   GENERALIZED CROSS VALIDATION - GCV =            57.290
 HANNAN AND QUINN (1979) CRITERION =               63.686
 RICE (1984) CRITERION =                           57.479
 SHIBATA (1981) CRITERION =                        56.804
 SCHWARZ (1978) CRITERION - SC =                   76.633
 AKAIKE (1974) INFORMATION CRITERION - AIC =       57.116
```

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	23535.	90.	261.50	4.826
ERROR	86103.	1589.	54.187	P-VALUE
TOTAL	0.10964E+06	1679.	65.299	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	0.18797E+07	91.	20656.	381.196
ERROR	86103.	1589.	54.187	P-VALUE
TOTAL	0.19658E+07	1680.	1170.1	0.000

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 1589 DF	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
BMI_SP	0.99289E-01	0.3600E-01	2.758	0.006	0.069	0.0690	0.0793
LFATDIET	-1.3572	0.7556	-1.796	0.073	-0.045	-0.0444	-0.0031
NE	-1.2184	0.5794	-2.103	0.036	-0.053	-0.0578	-0.0066
MW	-1.0822	0.4831	-2.240	0.025	-0.056	-0.0585	-0.0083
WEST	-1.1048	0.5337	-2.070	0.039	-0.052	-0.0561	-0.0071

MSANCC	0.88534	0.4424	2.001	0.046	0.050	0.0544	0.0117
NMSA	1.1839	0.5145	2.301	0.022	0.058	0.0657	0.0099
POVCAT2	-0.93008	0.5663	-1.642	0.101	-0.041	-0.0553	-0.0101
POVCAT3	-0.76795	0.6349	-1.210	0.227	-0.030	-0.0465	-0.0091
EMP	0.63749	0.4582	1.391	0.164	0.035	0.0381	0.0121
REGEX	-0.24759	0.4145	-0.5973	0.550	-0.015	-0.0153	-0.0038
MODEX	-0.56145E-01	0.5842	-0.9610E-01	0.923	-0.002	-0.0023	-0.0002
GOODH	0.71866	0.5729	1.254	0.210	0.031	0.0310	0.0186
FSYES	-0.19809	0.6955	-0.2848	0.776	-0.007	-0.0076	-0.0006
VEGEY	-1.8949	1.212	-1.563	0.118	-0.039	-0.0387	-0.0016
WINTER	0.69190	0.5437	1.273	0.203	0.032	0.0349	0.0044
SPRING	0.89383	0.5241	1.705	0.088	0.043	0.0498	0.0076
SUMMER	-0.15245	0.5424	-0.2811	0.779	-0.007	-0.0086	-0.0014
WKDYWKDY	-1.2217	1.188	-1.028	0.304	-0.026	-0.0756	-0.0179
WKDYWKED	-1.4206	1.190	-1.194	0.233	-0.030	-0.0879	-0.0208
AGE	0.18198	0.6610E-01	2.753	0.006	0.069	0.3752	0.2660
AGE2	-0.14851E-02	0.6555E-03	-2.266	0.024	-0.057	-0.3130	-0.1178
MALE	0.20429	0.4266	0.4788	0.632	0.012	0.0126	0.0032
HS	0.78389	0.5952	1.317	0.188	0.033	0.0457	0.0078
COL	0.73926	0.6131	1.206	0.228	0.030	0.0457	0.0108
NHISP	-1.3161	0.8492	-1.550	0.121	-0.039	-0.0416	-0.0368
BLACK	0.74135	0.6557	1.131	0.258	0.028	0.0295	0.0026
OTHER	-2.1957	0.8421	-2.607	0.009	-0.065	-0.0661	-0.0042
NVSMOKED	-0.72656	0.4607	-1.577	0.115	-0.040	-0.0449	-0.0106
SMOKEN	-0.42668	0.5445	-0.7836	0.433	-0.020	-0.0229	-0.0032
LCALDIET	0.74484	0.8848	0.8418	0.400	0.021	0.0207	0.0012
PREGLAC	-0.96995	2.060	-0.4709	0.638	-0.012	-0.0113	-0.0003
KQ2FA	-0.31879	0.6923	-0.4605	0.645	-0.012	-0.0116	-0.0087
KQ27S	-0.90291	0.4407	-2.049	0.041	-0.051	-0.0474	-0.0064
KQ27R	-0.60431	0.7589	-0.7963	0.426	-0.020	-0.0212	-0.0016
KQ27N	-0.84608	0.8220	-1.029	0.303	-0.026	-0.0279	-0.0020
KQ28S	-0.44089	0.4969	-0.8872	0.375	-0.022	-0.0262	-0.0048
KQ28R	-1.3372	0.6052	-2.209	0.027	-0.055	-0.0691	-0.0090
KQ28N	-0.85648	0.6856	-1.249	0.212	-0.031	-0.0402	-0.0045
KQ29S	-1.3921	0.9743	-1.429	0.153	-0.036	-0.0791	-0.0126
KQ29R	-1.1856	0.9840	-1.205	0.228	-0.030	-0.0707	-0.0131
KQ29N	-2.1005	1.004	-2.093	0.036	-0.052	-0.1196	-0.0192
KQ32L	0.48179	0.7230	0.6664	0.505	0.017	0.0295	0.0063
KQ32M	1.4660	0.7799	1.880	0.060	0.047	0.0868	0.0156
KQ32G	1.5220	0.8951	1.700	0.089	0.043	0.0594	0.0051
KQ33_A2	-0.47053	0.4365	-1.078	0.281	-0.027	-0.0290	-0.0064
KQ33_A3	-0.20482	0.5725	-0.3578	0.721	-0.009	-0.0089	-0.0009
KQ33_A4	-1.6902	0.7611	-2.221	0.027	-0.056	-0.0524	-0.0034
KQ33_B2	0.98862	0.4415	2.239	0.025	0.056	0.0604	0.0124
KQ33_B3	1.0465	0.6386	1.639	0.101	0.041	0.0384	0.0031
KQ33_B4	2.3818	1.217	1.956	0.051	0.049	0.0496	0.0021
KQ342	-0.14990	0.6526	-0.2297	0.818	-0.006	-0.0088	-0.0015
KQ343	0.10117	0.6787	0.1491	0.882	0.004	0.0060	0.0011
KQ344	1.1126	0.8159	1.364	0.173	0.034	0.0503	0.0053
KQ35S	1.9434	1.800	1.080	0.280	0.027	0.1118	0.0185
KQ35M	1.7685	1.820	0.9719	0.331	0.024	0.1090	0.0291
KQ35L	1.7419	1.851	0.9411	0.347	0.024	0.0686	0.0060
KQ372	0.80856	0.4767	1.696	0.090	0.043	0.0480	0.0087
KQ373	0.63947	0.5420	1.180	0.238	0.030	0.0334	0.0045
KQ374	2.5183	0.7480	3.367	0.001	0.084	0.0971	0.0083
KQ30S	-0.53081	0.6943	-0.7645	0.445	-0.019	-0.0326	-0.0070
KQ30R	-0.68882	0.7567	-0.9104	0.363	-0.023	-0.0391	-0.0062
KQ30N	-1.4344	0.8251	-1.739	0.082	-0.044	-0.0673	-0.0075
KQ31S	0.56769	0.4474	1.269	0.205	0.032	0.0322	0.0051
KQ31R	1.7577	0.7096	2.477	0.013	0.062	0.0633	0.0049
KQ31N	1.0218	0.6030	1.694	0.090	0.042	0.0486	0.0055
KQ36S	-0.53320	0.4663	-1.143	0.253	-0.029	-0.0272	-0.0035
KQ36R	1.1345	0.9191	1.234	0.217	0.031	0.0284	0.0015
KQ36N	0.58580	0.9641	0.6076	0.544	0.015	0.0188	0.0013
KQ26_AA	-0.55836	0.5714	-0.9772	0.329	-0.025	-0.0284	-0.0036
KQ26_AS	-0.32843	0.5027	-0.6533	0.514	-0.016	-0.0194	-0.0035
KQ26_AR	-0.55408	0.6106	-0.9074	0.364	-0.023	-0.0251	-0.0026

```
KQ26_BA   -1.2330       0.4682       -2.634      0.009-0.066     -0.0733      -0.0134
KQ26_BS  -0.41915       0.6130       -0.6838     0.494-0.017     -0.0176      -0.0017
KQ26_BR  -0.83779E-01 0.6429        -0.1303     0.896-0.003     -0.0033      -0.0003
KQ26_CA  -0.54139       0.6670       -0.8117     0.417-0.020     -0.0228      -0.0022
KQ26_CS  -0.81935E-01 0.5336        -0.1536     0.878-0.004     -0.0045      -0.0006
KQ26_CR   0.71251       0.5901        1.207      0.227 0.030      0.0344       0.0040
KQ26_DA   -1.7538       0.6458       -2.716      0.007-0.068     -0.0801      -0.0086
KQ26_DS  -0.43012       0.4941       -0.8705     0.384-0.022     -0.0258      -0.0048
KQ26_DR  -0.34719       0.6170       -0.5627     0.574-0.014     -0.0155      -0.0016
KQ26_EA  -0.21591       0.5961       -0.3622     0.717-0.009     -0.0119      -0.0018
KQ26_ES   0.41694       0.5150        0.8096     0.418 0.020      0.0240       0.0040
KQ26_ER   0.21010       0.7259        0.2894     0.772 0.007      0.0080       0.0007
KQ26_GA  -0.15946        1.041       -0.1531     0.878-0.004     -0.0073      -0.0008
KQ26_GS  -0.68734E-01 0.9666        -0.7111E-01 0.943-0.002     -0.0039      -0.0014
KQ26_GR   0.45306        1.066        0.4249     0.671 0.011      0.0164       0.0013
KQ26_FA  -0.90906       0.9071       -1.002      0.316-0.025     -0.0398      -0.0040
KQ26_FS   0.27494       0.7370        0.3730     0.709 0.009      0.0166       0.0050
KQ26_FR   0.91352       0.8247        1.108      0.268 0.028      0.0408       0.0042
CONSTANT   27.721        3.344         8.291      0.000 0.204      0.0000       0.8340

DURBIN-WATSON = 1.8978    VON NEUMANN RATIO = 1.8989    RHO =  0.04990
RESIDUAL SUM = -0.29599E-10  RESIDUAL VARIANCE =   54.187
SUM OF ABSOLUTE ERRORS=    9574.7
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.2147
RUNS TEST:  801 RUNS,  835 POS,    0 ZERO,  845 NEG  NORMAL STATISTIC = -1.9510
COEFFICIENT OF SKEWNESS =  -0.0521 WITH STANDARD DEVIATION OF 0.0597
COEFFICIENT OF EXCESS KURTOSIS =   0.2716 WITH STANDARD DEVIATION OF 0.1193

     GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
OBSERVED   4.0  0.0  0.0  2.0  2.0  3.0 10.0  3.0  5.0  6.0 10.0  7.0 14.0 13.0 13.0 20.0 25.0 34.0 37.0
52.0
          44.0 41.0 41.0 59.0 69.0 52.0 71.0 65.0 83.0 60.0 56.0 67.0 71.0 65.0 70.0 63.0 54.0 46.0 45.0
50.0
          39.0 33.0 33.0 18.0 21.0 18.0 16.0 17.0  8.0  9.0  8.0  7.0  7.0  2.0  2.0  6.0  0.0  2.0  0.0
2.0

EXPECTED   3.2  1.2  1.5  2.0  2.5  3.4  4.2  5.4  6.7  8.2  9.9 12.1 14.6 17.1 20.2 23.5 26.9 30.7 34.6
38.6
          42.7 46.7 50.6 54.3 57.5 60.6 63.0 64.8 66.4 66.9 66.9 66.4 64.8 63.0 60.6 57.5 54.3 50.6 46.7
42.7
          38.6 34.6 30.7 26.9 23.5 20.2 17.1 14.6 12.1  9.9  8.2  6.7  5.4  4.2  3.4  2.5  2.0  1.5  1.2
3.2

CHI-SQUARE =    59.6095 WITH-33 DEGREES OF FREEDOM
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
```

```
|_end
F STATISTIC =   2.3618673     WITH    3 AND 1589 D.F.  P-VALUE= 0.06964
WALD CHI-SQUARE STATISTIC =   7.0856018     WITH    3 D.F.  P-VALUE= 0.06922
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.42339
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =   1.8033797     WITH    3 AND 1589 D.F.  P-VALUE= 0.14458
WALD CHI-SQUARE STATISTIC =   5.4101392     WITH    3 D.F.  P-VALUE= 0.14411
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.55451
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =   2.5378330     WITH    3 AND 1589 D.F.  P-VALUE= 0.05510
WALD CHI-SQUARE STATISTIC =   7.6134989     WITH    3 D.F.  P-VALUE= 0.05471
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.39404
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =   1.6029279     WITH    3 AND 1589 D.F.  P-VALUE= 0.18680
WALD CHI-SQUARE STATISTIC =   4.8087837     WITH    3 D.F.  P-VALUE= 0.18635
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.62386
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq35l=0
|_end
F STATISTIC =  0.41925106     WITH    3 AND 1589 D.F.  P-VALUE= 0.73921
WALD CHI-SQUARE STATISTIC =   1.2577532     WITH    3 D.F.  P-VALUE= 0.73919
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =   3.9270318     WITH    3 AND 1589 D.F.  P-VALUE= 0.00832
WALD CHI-SQUARE STATISTIC =   11.781095     WITH    3 D.F.  P-VALUE= 0.00817
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.25465
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =   1.1802630     WITH    3 AND 1589 D.F.  P-VALUE= 0.31587
WALD CHI-SQUARE STATISTIC =   3.5407890     WITH    3 D.F.  P-VALUE= 0.31551
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.84727
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =   2.3814877     WITH    3 AND 1589 D.F.  P-VALUE= 0.06785
WALD CHI-SQUARE STATISTIC =   7.1444632     WITH    3 D.F.  P-VALUE= 0.06743
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41991
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
F STATISTIC =   1.3414482     WITH    3 AND 1589 D.F.  P-VALUE= 0.25926
WALD CHI-SQUARE STATISTIC =   4.0243445     WITH    3 D.F.  P-VALUE= 0.25885
```

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UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.74546
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =  0.43916739     WITH    3 AND 1589 D.F.  P-VALUE= 0.72501
WALD CHI-SQUARE STATISTIC =   1.3175022     WITH    3 D.F.  P-VALUE= 0.72498
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
F STATISTIC =   2.5287634     WITH    3 AND 1589 D.F.  P-VALUE= 0.05577
WALD CHI-SQUARE STATISTIC =   7.5862903     WITH    3 D.F.  P-VALUE= 0.05538
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.39545
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   1.0720949     WITH    3 AND 1589 D.F.  P-VALUE= 0.35979
WALD CHI-SQUARE STATISTIC =   3.2162846     WITH    3 D.F.  P-VALUE= 0.35947
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.93275
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =   2.5764888     WITH    3 AND 1589 D.F.  P-VALUE= 0.05233
WALD CHI-SQUARE STATISTIC =   7.7294663     WITH    3 D.F.  P-VALUE= 0.05195
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.38813
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.51909571     WITH    3 AND 1589 D.F.  P-VALUE= 0.66918
WALD CHI-SQUARE STATISTIC =   1.5572871     WITH    3 D.F.  P-VALUE= 0.66911
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =  0.25548638     WITH    3 AND 1589 D.F.  P-VALUE= 0.85746
WALD CHI-SQUARE STATISTIC =  0.76645915     WITH    3 D.F.  P-VALUE= 0.85747
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   2.1332258     WITH    3 AND 1589 D.F.  P-VALUE= 0.09415
WALD CHI-SQUARE STATISTIC =   6.3996774     WITH    3 D.F.  P-VALUE= 0.09370
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.46877
|_*
|_* PERCENTAGE OF CALORIES FROM SATURATED FAT
|_*

|_ols pctsfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|     lcaldiet preglac kq2fa &
|     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
```

```
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR= 5959 CURRENT PAR= 7000
 OLS ESTIMATION
    1680 OBSERVATIONS     DEPENDENT VARIABLE = PCTSFAT
...NOTE..SAMPLE RANGE SET TO:     1, 1877

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =    0.2202     R-SQUARE ADJUSTED =    0.1760
VARIANCE OF THE ESTIMATE-SIGMA**2 =    9.9668
STANDARD ERROR OF THE ESTIMATE-SIGMA =    3.1570
SUM OF SQUARED ERRORS-SSE=    15837.
MEAN OF DEPENDENT VARIABLE =    12.688
LOG OF THE LIKELIHOOD FUNCTION = -4268.42

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =        10.507
    (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =    2.3519
 SCHWARZ (1978) CRITERION - LOG SC =                2.6458
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
    GENERALIZED CROSS VALIDATION - GCV =             10.538
 HANNAN AND QUINN (1979) CRITERION =                 11.714
 RICE (1984) CRITERION =                             10.572
 SHIBATA (1981) CRITERION =                          10.448
 SCHWARZ (1978) CRITERION - SC =                     14.095
 AKAIKE (1974) INFORMATION CRITERION - AIC =         10.506

                    ANALYSIS OF VARIANCE - FROM MEAN
                     SS          DF            MS                  F
REGRESSION         4472.3         90.        49.692              4.986
ERROR              15837.       1589.        9.9668            P-VALUE
TOTAL              20309.       1679.        12.096              0.000

                    ANALYSIS OF VARIANCE - FROM ZERO
                     SS          DF            MS                  F
REGRESSION       0.27495E+06      91.        3021.4            303.147
ERROR              15837.       1589.        9.9668            P-VALUE
TOTAL            0.29078E+06    1680.        173.09              0.000


VARIABLE   ESTIMATED  STANDARD   T-RATIO        PARTIAL STANDARDIZED ELASTICITY
  NAME    COEFFICIENT   ERROR    1589 DF   P-VALUE CORR. COEFFICIENT  AT MEANS
BMI_SP    0.39135E-01 0.1566E-01   2.499    0.013 0.063    0.0632      0.0819
LFATDIET -0.48065     0.3249      -1.479    0.139-0.037   -0.0365     -0.0029
NE       -0.73420     0.2487      -2.952    0.003-0.074   -0.0810     -0.0104
MW       -0.42292     0.2115      -1.999    0.046-0.050   -0.0531     -0.0085
WEST     -0.62267     0.2282      -2.729    0.006-0.068   -0.0734     -0.0105
MSANCC    0.34896     0.1858       1.878    0.061 0.047    0.0498      0.0120
NMSA      0.60853     0.2236       2.722    0.007 0.068    0.0784      0.0133
POVCAT2  -0.25280     0.2497      -1.012    0.312-0.025   -0.0349     -0.0072
POVCAT3  -0.23541     0.2766     -0.8512    0.395-0.021   -0.0331     -0.0073
EMP       0.17595     0.1978      0.8895    0.374 0.022    0.0244      0.0087
REGEX    -0.14751     0.1794     -0.8225    0.411-0.021   -0.0212     -0.0059
MODEX     0.17512E-01 0.2483      0.7054E-01 0.944 0.002   0.0017      0.0002
GOODH     0.21776     0.2500      0.8711    0.384 0.022    0.0218      0.0147
FSYES    -0.14028     0.3078     -0.4557    0.649-0.011   -0.0124     -0.0012
VEGEY    -1.2420      0.5795      -2.143    0.032-0.054   -0.0589     -0.0027
WINTER    0.34263     0.2372       1.444    0.149 0.036    0.0401      0.0057
SPRING    0.31771     0.2264       1.403    0.161 0.035    0.0411      0.0070
```

SUMMER	-0.24804E-02	0.2318	-0.1070E-01	0.991	0.000	-0.0003	-0.0001
WKDYWKDY	-0.28776	0.5020	-0.5733	0.567	-0.014	-0.0414	-0.0110
WKDYWKED	-0.29365	0.5013	-0.5858	0.558	-0.015	-0.0422	-0.0113
AGE	0.40610E-01	0.2824E-01	1.438	0.151	0.036	0.1945	0.1555
AGE2	-0.32180E-03	0.2837E-03	-1.134	0.257	-0.028	-0.1576	-0.0669
MALE	0.19048	0.1843	1.033	0.302	0.026	0.0274	0.0079
HS	0.24808	0.2641	0.9392	0.348	0.024	0.0336	0.0065
COL	0.21508E-01	0.2668	0.8061E-01	0.936	0.002	0.0031	0.0008
NHISP	-0.42924	0.3628	-1.183	0.237	-0.030	-0.0315	-0.0315
BLACK	0.69161	0.2912	2.375	0.018	0.059	0.0640	0.0064
OTHER	-0.93494	0.3526	-2.651	0.008	-0.066	-0.0654	-0.0046
NVSMOKED	-0.32738	0.1951	-1.678	0.094	-0.042	-0.0471	-0.0125
SMOKEN	-0.12276	0.2326	-0.5278	0.598	-0.013	-0.0153	-0.0024
LCALDIET	0.46453	0.3870	1.200	0.230	0.030	0.0299	0.0019
PREGLAC	-0.65221	0.7892	-0.8264	0.409	-0.021	-0.0176	-0.0005
KQ2FA	-0.32651	0.2842	-1.149	0.251	-0.029	-0.0276	-0.0233
KQ27S	-0.51786	0.1890	-2.740	0.006	-0.069	-0.0632	-0.0096
KQ27R	-0.13135	0.3367	-0.3902	0.696	-0.010	-0.0107	-0.0009
KQ27N	-0.28477	0.3614	-0.7880	0.431	-0.020	-0.0218	-0.0017
KQ28S	-0.15775E-01	0.2128	-0.7413E-01	0.941	-0.002	-0.0022	-0.0005
KQ28R	-0.45444	0.2643	-1.719	0.086	-0.043	-0.0545	-0.0080
KQ28N	-0.37244	0.2910	-1.280	0.201	-0.032	-0.0406	-0.0051
KQ29S	-0.49811	0.4342	-1.147	0.251	-0.029	-0.0658	-0.0118
KQ29R	-0.31732	0.4403	-0.7207	0.471	-0.018	-0.0440	-0.0092
KQ29N	-0.52897	0.4465	-1.185	0.236	-0.030	-0.0700	-0.0127
KQ32L	0.11675	0.3123	0.3738	0.709	0.009	0.0166	0.0040
KQ32M	0.46240	0.3309	1.397	0.162	0.035	0.0636	0.0129
KQ32G	0.54094	0.3835	1.411	0.159	0.035	0.0490	0.0048
KQ33_A2	-0.15057E-02	0.1832	-0.8220E-02	0.993	0.000	-0.0002	-0.0001
KQ33_A3	0.14635	0.2548	0.5743	0.566	0.014	0.0148	0.0017
KQ33_A4	-0.26717	0.3398	-0.7862	0.432	-0.020	-0.0192	-0.0014
KQ33_B2	0.57756	0.1876	3.079	0.002	0.077	0.0819	0.0190
KQ33_B3	0.52526	0.2859	1.837	0.066	0.046	0.0448	0.0040
KQ33_B4	1.0142	0.5096	1.990	0.047	0.050	0.0491	0.0023
KQ342	0.15382E-02	0.2867	0.5366E-02	0.996	0.000	0.0002	0.0000
KQ343	0.24400	0.2951	0.8267	0.409	0.021	0.0334	0.0067
KQ344	0.66588	0.3503	1.901	0.057	0.048	0.0699	0.0083
KQ35S	0.57459	0.7689	0.7473	0.455	0.019	0.0768	0.0143
KQ35M	0.62309	0.7743	0.8047	0.421	0.020	0.0892	0.0269
KQ35L	0.49448	0.7840	0.6307	0.528	0.016	0.0452	0.0045
KQ372	0.42981	0.2024	2.124	0.034	0.053	0.0593	0.0122
KQ373	0.23873	0.2342	1.020	0.308	0.026	0.0290	0.0044
KQ374	0.90515	0.3113	2.908	0.004	0.073	0.0811	0.0078
KQ30S	-0.42285	0.2951	-1.433	0.152	-0.036	-0.0603	-0.0146
KQ30R	-0.56589	0.3239	-1.747	0.081	-0.044	-0.0746	-0.0134
KQ30N	-0.88572	0.3557	-2.490	0.013	-0.062	-0.0965	-0.0121
KQ31S	0.19847	0.1895	1.048	0.295	0.026	0.0261	0.0047
KQ31R	0.67234	0.3065	2.194	0.028	0.055	0.0563	0.0050
KQ31N	0.40044	0.2641	1.516	0.130	0.038	0.0443	0.0057
KQ36S	-0.19558	0.2054	-0.9520	0.341	-0.024	-0.0232	-0.0033
KQ36R	0.59180	0.3814	1.552	0.121	0.039	0.0345	0.0020
KQ36N	0.20996	0.4065	0.5165	0.606	0.013	0.0157	0.0012
KQ26_AA	-0.31103	0.2427	-1.282	0.200	-0.032	-0.0367	-0.0053
KQ26_AS	-0.13655	0.2182	-0.6259	0.531	-0.016	-0.0188	-0.0038
KQ26_AR	-0.23428	0.2698	-0.8685	0.385	-0.022	-0.0246	-0.0029
KQ26_BA	-0.44239	0.1994	-2.219	0.027	-0.056	-0.0611	-0.0126
KQ26_BS	-0.17780E-01	0.2657	-0.6692E-01	0.947	-0.002	-0.0017	-0.0002
KQ26_BR	-0.28996E-01	0.2766	-0.1048	0.917	-0.003	-0.0027	-0.0003
KQ26_CA	-0.97294E-01	0.2868	-0.3392	0.735	-0.009	-0.0095	-0.0010
KQ26_CS	-0.12926	0.2308	-0.5602	0.575	-0.014	-0.0164	-0.0027
KQ26_CR	0.23983	0.2502	0.9584	0.338	0.024	0.0269	0.0035
KQ26_DA	-0.61087	0.2768	-2.207	0.027	-0.055	-0.0648	-0.0078
KQ26_DS	-0.15998	0.2069	-0.7731	0.440	-0.019	-0.0223	-0.0047
KQ26_DR	-0.83387E-01	0.2649	-0.3148	0.753	-0.008	-0.0087	-0.0010
KQ26_EA	0.14520	0.2500	0.5809	0.561	0.015	0.0186	0.0031
KQ26_ES	0.28116	0.2233	1.259	0.208	0.032	0.0376	0.0070
KQ26_ER	0.17047	0.3126	0.5453	0.586	0.014	0.0151	0.0014

```
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   5.0089948     WITH   57 AND 1589 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   285.51270     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.19964
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =   1.5193710     WITH    3 AND 1589 D.F.  P-VALUE= 0.20761
WALD CHI-SQUARE STATISTIC =   4.5581129     WITH    3 D.F.  P-VALUE= 0.20716
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.65817
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =   1.7479460     WITH    3 AND 1589 D.F.  P-VALUE= 0.15525
WALD CHI-SQUARE STATISTIC =   5.2438379     WITH    3 D.F.  P-VALUE= 0.15479
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.57210
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =   2.0382540     WITH    3 AND 1589 D.F.  P-VALUE= 0.10661
WALD CHI-SQUARE STATISTIC =   6.1147620     WITH    3 D.F.  P-VALUE= 0.10616
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.49062
|_test
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
```

```
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =   3.8507168     WITH    3 AND 1589 D.F.  P-VALUE= 0.00925
WALD CHI-SQUARE STATISTIC =   11.552150     WITH    3 D.F.  P-VALUE= 0.00909
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.25969
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =   2.4507362     WITH    3 AND 1589 D.F.  P-VALUE= 0.06188
WALD CHI-SQUARE STATISTIC =   7.3522086     WITH    3 D.F.  P-VALUE= 0.06148
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.40804
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_end
F STATISTIC =  0.27870998     WITH    3 AND 1589 D.F.  P-VALUE= 0.84080
WALD CHI-SQUARE STATISTIC =  0.83612995     WITH    3 D.F.  P-VALUE= 0.84081
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =   3.3768603     WITH    3 AND 1589 D.F.  P-VALUE= 0.01772
WALD CHI-SQUARE STATISTIC =   10.130581     WITH    3 D.F.  P-VALUE= 0.01749
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.29613
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =   2.1553429     WITH    3 AND 1589 D.F.  P-VALUE= 0.09146
WALD CHI-SQUARE STATISTIC =   6.4660288     WITH    3 D.F.  P-VALUE= 0.09101
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.46396
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =   1.9001995     WITH    3 AND 1589 D.F.  P-VALUE= 0.12759
WALD CHI-SQUARE STATISTIC =   5.7005985     WITH    3 D.F.  P-VALUE= 0.12712
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.52626
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
F STATISTIC =   1.4381168     WITH    3 AND 1589 D.F.  P-VALUE= 0.22989
WALD CHI-SQUARE STATISTIC =   4.3143505     WITH    3 D.F.  P-VALUE= 0.22946
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.69535
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =  0.63470363     WITH    3 AND 1589 D.F.  P-VALUE= 0.59266
WALD CHI-SQUARE STATISTIC =   1.9041109     WITH    3 D.F.  P-VALUE= 0.59255
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
```

```
KQ26_GA  -0.23955      0.4429      -0.5409      0.589-0.014     -0.0256     -0.0031
KQ26_GS  -0.16289      0.4099      -0.3974      0.691-0.010     -0.0217     -0.0088
KQ26_GR  -0.26987      0.4571      -0.5904      0.555-0.015     -0.0227     -0.0020
KQ26_FA  -0.42317      0.3659       -1.156      0.248-0.029     -0.0430     -0.0049
KQ26_FS   0.44092E-01 0.3016       0.1462      0.884 0.004      0.0062      0.0021
KQ26_FR   0.42973      0.3484        1.234      0.218 0.031      0.0446      0.0052
CONSTANT    11.277       1.399        8.062      0.000 0.198      0.0000      0.8888

DURBIN-WATSON = 1.8636    VON NEUMANN RATIO = 1.8647    RHO =  0.06703
RESIDUAL SUM =  0.22796E-10  RESIDUAL VARIANCE =   9.9668
SUM OF ABSOLUTE ERRORS=   4079.6
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.2202
RUNS TEST:  799 RUNS,  828 POS,    0 ZERO,  852 NEG  NORMAL STATISTIC = -2.0421
COEFFICIENT OF SKEWNESS =   0.0679 WITH STANDARD DEVIATION OF 0.0597
COEFFICIENT OF EXCESS KURTOSIS =   0.4078 WITH STANDARD DEVIATION OF 0.1193

     GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
OBSERVED  3.0  0.0  4.0  3.0  1.0  2.0  3.0  3.0  4.0  7.0  2.0  7.0 13.0 14.0 24.0 18.0 39.0 31.0 40.0
41.0
         54.0 43.0 47.0 42.0 53.0 58.0 72.0 91.0 57.0 76.0 60.0 66.0 77.0 64.0 62.0 65.0 47.0 47.0 46.0
48.0
         41.0 33.0 32.0 14.0 22.0 13.0 19.0 16.0  8.0 11.0  4.0  9.0  3.0  7.0  2.0  3.0  2.0  2.0  0.0
5.0

EXPECTED  3.2  1.2  1.5  2.0  2.5  3.4  4.2  5.4  6.7  8.2  9.9 12.1 14.6 17.1 20.2 23.5 26.9 30.7 34.6
38.6
         42.7 46.7 50.6 54.3 57.5 60.6 63.0 64.8 66.4 66.9 66.9 66.4 64.8 63.0 60.6 57.5 54.3 50.6 46.7
42.7
         38.6 34.6 30.7 26.9 23.5 20.2 17.1 14.6 12.1  9.9  8.2  6.7  5.4  4.2  3.4  2.5  2.0  1.5  1.2
3.2

CHI-SQUARE =   74.4963 WITH-33 DEGREES OF FREEDOM
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
```

```
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   4.2612181     WITH   57 AND 1589 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   242.88943     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.23467
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =   2.5668960     WITH    3 AND 1589 D.F.  P-VALUE= 0.05300
WALD CHI-SQUARE STATISTIC =   7.7006879     WITH    3 D.F.  P-VALUE= 0.05262
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.38958
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =   1.6442194     WITH    3 AND 1589 D.F.  P-VALUE= 0.17725
WALD CHI-SQUARE STATISTIC =   4.9326583     WITH    3 D.F.  P-VALUE= 0.17680
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.60819
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =  0.82379195     WITH    3 AND 1589 D.F.  P-VALUE= 0.48069
WALD CHI-SQUARE STATISTIC =   2.4713758     WITH    3 D.F.  P-VALUE= 0.48049
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_end
F STATISTIC =   1.6924603     WITH    3 AND 1589 D.F.  P-VALUE= 0.16668
WALD CHI-SQUARE STATISTIC =   5.0773808     WITH    3 D.F.  P-VALUE= 0.16622
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.59086
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =  0.45771726     WITH    3 AND 1589 D.F.  P-VALUE= 0.71188
WALD CHI-SQUARE STATISTIC =   1.3731518     WITH    3 D.F.  P-VALUE= 0.71184
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
```

```
test kq26_es=0
test kq26_er=0
end
WALD CHI-SQUARE STATISTIC =   2.8822658     WITH    3 D.F.  P-VALUE= 0.41014
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
test
test kq26_ga=0
test kq26_gs=0
test kq26_gr=0
end
WALD CHI-SQUARE STATISTIC =   1.9652278     WITH    3 D.F.  P-VALUE= 0.57966
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
test
test kq26_fa=0
test kq26_fs=0
test kq26_fr=0
end
WALD CHI-SQUARE STATISTIC =   8.1654266     WITH    3 D.F.  P-VALUE= 0.04271
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.36740
.
stop
```

Appendix G.

Regression Runs in the Consideration of All Avoidance, Modification, Substitution, and Replacement Questions Simultaneously Pooled Analysis Over the Years 1994 to 1996

Percentage of Calories from Total Fat
Percentage of Calories from Saturated Fat
Dietary Guideline for Fat

POOLED

```
|_* Analysis of 1994-96 CSFII/DHKS Data for 5649 Individuals
|_smpl 1 5649

|_*
|_* PERCENTAGE OF CALORIES FROM TOTAL FAT
|_*

|_ols pctfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|     lcaldiet preglac kq2fa &
|     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR=17820 CURRENT PAR=19000
 OLS ESTIMATION
    5026 OBSERVATIONS     DEPENDENT VARIABLE = PCTFAT
...NOTE..SAMPLE RANGE SET TO:    1, 5649

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =   0.1841     R-SQUARE ADJUSTED =   0.1693
VARIANCE OF THE ESTIMATE-SIGMA**2 =   52.719
STANDARD ERROR OF THE ESTIMATE-SIGMA =   7.2608
SUM OF SQUARED ERRORS-SSE=  0.26017E+06
MEAN OF DEPENDENT VARIABLE =   33.481
LOG OF THE LIKELIHOOD FUNCTION = -17049.6

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =      53.673
    (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =   3.9829
 SCHWARZ (1978) CRITERION - LOG SC =               4.1010
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
    GENERALIZED CROSS VALIDATION - GCV =           53.691
 HANNAN AND QUINN (1979) CRITERION =               55.941
 RICE (1984) CRITERION =                           53.709
 SHIBATA (1981) CRITERION =                        53.639
 SCHWARZ (1978) CRITERION - SC =                   60.401
 AKAIKE (1974) INFORMATION CRITERION - AIC =       53.673

                   ANALYSIS OF VARIANCE - FROM MEAN
                     SS          DF            MS                F
REGRESSION        58724.         90.        652.49            12.377
ERROR           0.26017E+06   4935.        52.719            P-VALUE
TOTAL           0.31889E+06   5025.        63.461              0.000

                   ANALYSIS OF VARIANCE - FROM ZERO
                     SS          DF            MS                F
REGRESSION      0.56929E+07     91.        62559.           1186.653
ERROR           0.26017E+06   4935.        52.719            P-VALUE
TOTAL           0.59530E+07   5026.        1184.4              0.000

VARIABLE   ESTIMATED  STANDARD   T-RATIO       PARTIAL STANDARDIZED ELASTICITY
  NAME    COEFFICIENT   ERROR    4935 DF   P-VALUE CORR. COEFFICIENT  AT MEANS
BMI_SP    0.74784E-01 0.2139E-01   3.496     0.000 0.050     0.0508     0.0593
LFATDIET  -2.1250      0.4068     -5.223     0.000-0.074    -0.0762    -0.0057
NE       -0.66198      0.3165     -2.092     0.037-0.030    -0.0327    -0.0038
MW       -0.13901      0.2748    -0.5059     0.613-0.007    -0.0076    -0.0011
```

WEST	-0.57068	0.3054	-1.869	0.062-0.027	-0.0286	-0.0034
MSANCC	0.27200	0.2540	1.071	0.284 0.015	0.0169	0.0036
NMSA	0.89074	0.2941	3.028	0.002 0.043	0.0496	0.0071
POVCAT2	-0.36406	0.3103	-1.173	0.241-0.017	-0.0222	-0.0042
POVCAT3	-0.13449E-01	0.3491	-0.3852E-01	0.969-0.001	-0.0008	-0.0001
EMP	0.45448	0.2772	1.639	0.101 0.023	0.0281	0.0080
REGEX	-0.15063	0.2383	-0.6321	0.527-0.009	-0.0095	-0.0022
MODEX	-0.37077E-01	0.3378	-0.1098	0.913-0.002	-0.0015	-0.0001
GOODH	0.21816	0.3020	0.7223	0.470 0.010	0.0102	0.0054
FSYES	-0.23605	0.4030	-0.5857	0.558-0.008	-0.0090	-0.0007
VEGEY	-1.0217	0.7254	-1.408	0.159-0.020	-0.0212	-0.0009
WINTER	0.51487E-01	0.3021	0.1704	0.865 0.002	0.0027	0.0003
SPRING	0.22558	0.2903	0.7769	0.437 0.011	0.0123	0.0017
SUMMER	-0.42614	0.2874	-1.483	0.138-0.021	-0.0241	-0.0036
WKDYWKDY	-0.51414	0.6267	-0.8204	0.412-0.012	-0.0323	-0.0075
WKDYWKED	-0.18419	0.6242	-0.2951	0.768-0.004	-0.0116	-0.0027
AGE	0.15027	0.3776E-01	3.980	0.000 0.057	0.3216	0.2272
AGE2	-0.13156E-02	0.3679E-03	-3.575	0.000-0.051	-0.2953	-0.1121
MALE	-0.43323	0.2403	-1.803	0.071-0.026	-0.0272	-0.0066
HS	-0.27741	0.3213	-0.8635	0.388-0.012	-0.0166	-0.0029
COL	-0.47205	0.3358	-1.406	0.160-0.020	-0.0295	-0.0063
NHISP	-0.53470	0.4532	-1.180	0.238-0.017	-0.0177	-0.0148
BLACK	0.94860E-01	0.3619	0.2621	0.793 0.004	0.0038	0.0003
OTHER	-2.5903	0.5102	-5.077	0.000-0.072	-0.0768	-0.0046
NVSMOKED	-0.52134	0.2738	-1.904	0.057-0.027	-0.0327	-0.0073
SMOKEN	0.13672	0.3057	0.4472	0.655 0.006	0.0076	0.0011
LCALDIET	-0.27126	0.5100	-0.5318	0.595-0.008	-0.0082	-0.0005
PREGLAC	0.65534	1.145	0.5721	0.567 0.008	0.0074	0.0002
KQ2FA	0.65890	0.3602	1.829	0.067 0.026	0.0249	0.0177
KQ27S	-0.94508	0.2554	-3.700	0.000-0.053	-0.0517	-0.0072
KQ27R	-1.1673	0.4095	-2.851	0.004-0.041	-0.0410	-0.0030
KQ27N	-1.6575	0.4760	-3.482	0.001-0.050	-0.0591	-0.0044
KQ28S	-0.46845	0.2863	-1.636	0.102-0.023	-0.0286	-0.0054
KQ28R	-0.61770	0.3502	-1.764	0.078-0.025	-0.0309	-0.0037
KQ28N	-0.42930	0.3862	-1.112	0.266-0.016	-0.0211	-0.0024
KQ29S	-1.0175	0.7059	-1.441	0.150-0.021	-0.0587	-0.0092
KQ29R	-1.2238	0.7133	-1.716	0.086-0.024	-0.0735	-0.0129
KQ29N	-1.7337	0.7185	-2.413	0.016-0.034	-0.1015	-0.0166
KQ32L	0.47048	0.3990	1.179	0.238 0.017	0.0293	0.0062
KQ32M	1.0947	0.4286	2.554	0.011 0.036	0.0653	0.0113
KQ32G	1.0682	0.5020	2.128	0.033 0.030	0.0414	0.0034
KQ33_A2	-0.24214	0.2487	-0.9738	0.330-0.014	-0.0151	-0.0031
KQ33_A3	-0.15156	0.3454	-0.4387	0.661-0.006	-0.0064	-0.0006
KQ33_A4	-0.26966	0.4397	-0.6133	0.540-0.009	-0.0087	-0.0006
KQ33_B2	0.63610	0.2417	2.632	0.009 0.037	0.0390	0.0074
KQ33_B3	0.30482	0.4096	0.7443	0.457 0.011	0.0104	0.0007
KQ33_B4	-0.85075E-01	0.6405	-0.1328	0.894-0.002	-0.0020	-0.0001
KQ342	0.92505E-01	0.3524	0.2625	0.793 0.004	0.0056	0.0010
KQ343	0.34485	0.3743	0.9214	0.357 0.013	0.0201	0.0033
KQ344	0.46780	0.4471	1.046	0.296 0.015	0.0213	0.0022
KQ35S	2.5379	1.041	2.437	0.015 0.035	0.1502	0.0253
KQ35M	2.6882	1.048	2.564	0.010 0.036	0.1684	0.0428
KQ35L	2.9123	1.089	2.675	0.007 0.038	0.1141	0.0095
KQ372	1.1573	0.2602	4.448	0.000 0.063	0.0696	0.0124
KQ373	1.7294	0.3051	5.669	0.000 0.080	0.0895	0.0112
KQ374	2.2115	0.3948	5.602	0.000 0.079	0.0886	0.0076
KQ30S	-0.46772	0.3896	-1.201	0.230-0.017	-0.0292	-0.0062
KQ30R	-0.36360	0.4296	-0.8464	0.397-0.012	-0.0206	-0.0031
KQ30N	-1.7358	0.4700	-3.693	0.000-0.053	-0.0844	-0.0095
KQ31S	0.56564E-01	0.2610	0.2167	0.828 0.003	0.0032	0.0005
KQ31R	0.46536	0.4238	1.098	0.272 0.016	0.0161	0.0011
KQ31N	0.58515	0.3301	1.772	0.076 0.025	0.0285	0.0032
KQ36S	-0.12204	0.2738	-0.4457	0.656-0.006	-0.0062	-0.0008
KQ36R	0.80256	0.5414	1.482	0.138 0.021	0.0201	0.0010
KQ36N	1.2012	0.4829	2.488	0.013 0.035	0.0409	0.0029
KQ26_AA	-0.29472	0.3305	-0.8918	0.373-0.013	-0.0152	-0.0019
KQ26_AS	0.21355	0.2866	0.7452	0.456 0.011	0.0129	0.0023

KQ26_AR	0.25985	0.3534	0.7353	0.462	0.010	0.0115	0.0011
KQ26_BA	-1.4252	0.2825	-5.045	0.000	-0.072	-0.0856	-0.0151
KQ26_BS	0.25757E-01	0.3497	0.7365E-01	0.941	0.001	0.0011	0.0001
KQ26_BR	-0.36030	0.3700	-0.9739	0.330	-0.014	-0.0145	-0.0013
KQ26_CA	-1.0158	0.3918	-2.593	0.010	-0.037	-0.0455	-0.0045
KQ26_CS	-0.70813	0.3133	-2.260	0.024	-0.032	-0.0389	-0.0054
KQ26_CR	0.30805	0.3335	0.9238	0.356	0.013	0.0148	0.0016
KQ26_DA	-0.82269	0.3776	-2.179	0.029	-0.031	-0.0391	-0.0043
KQ26_DS	0.35784E-01	0.2893	0.1237	0.902	0.002	0.0022	0.0004
KQ26_DR	0.13214E-01	0.3522	0.3752E-01	0.970	0.001	0.0006	0.0001
KQ26_EA	-0.16250	0.3446	-0.4716	0.637	-0.007	-0.0091	-0.0013
KQ26_ES	0.80524E-01	0.3030	0.2657	0.790	0.004	0.0047	0.0008
KQ26_ER	0.69668E-01	0.4006	0.1739	0.862	0.002	0.0027	0.0002
KQ26_GA	-1.0291	0.6116	-1.683	0.093	-0.024	-0.0485	-0.0052
KQ26_GS	-0.49412	0.5603	-0.8820	0.378	-0.013	-0.0288	-0.0101
KQ26_GR	-0.29337	0.6276	-0.4674	0.640	-0.007	-0.0107	-0.0008
KQ26_FA	-0.96260	0.4848	-1.985	0.047	-0.028	-0.0438	-0.0045
KQ26_FS	-0.29697	0.4078	-0.7283	0.466	-0.010	-0.0182	-0.0054
KQ26_FR	-0.15779	0.4718	-0.3344	0.738	-0.005	-0.0070	-0.0007
CONSTANT	28.408	1.974	14.39	0.000	0.201	0.0000	0.8485

```
DURBIN-WATSON = 1.9395    VON NEUMANN RATIO = 1.9398    RHO =  0.02968
RESIDUAL SUM = -0.75946E-10  RESIDUAL VARIANCE =   52.719
SUM OF ABSOLUTE ERRORS=   28664.
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.1841
RUNS TEST: 2531 RUNS, 2495 POS,     0 ZERO, 2531 NEG  NORMAL STATISTIC =  0.4833
COEFFICIENT OF SKEWNESS =   0.0348 WITH STANDARD DEVIATION OF 0.0345
COEFFICIENT OF EXCESS KURTOSIS =   0.2012 WITH STANDARD DEVIATION OF 0.0691

     GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
 OBSERVED  9.0  3.0  2.0  6.0  5.0 11.0  8.0 19.0 18.0 22.0 22.0 35.0 49.0 54.0
55.0 67.0 79.0 87.0104.0115.0

114.0158.0157.0175.0154.0202.0203.0181.0195.0222.0201.0206.0197.0192.0181.0173.0
168.0159.0132.0111.0
         108.0 96.0 98.0 78.0 83.0 51.0 38.0 31.0 41.0 33.0 23.0 20.0 13.0 16.0
10.0  5.0  7.0  4.0  4.0 16.0

 EXPECTED  9.5  3.5  4.5  6.0  7.5 10.1 12.6 16.1 20.1 24.6 29.7 36.2 43.7 51.3
60.3 70.4 80.4 92.0103.5115.6

127.7139.7151.3162.3171.9181.4188.5194.0198.5200.0200.0198.5194.0188.5181.4171.9
162.3151.3139.7127.7
         115.6103.5 92.0 80.4 70.4 60.3 51.3 43.7 36.2 29.7 24.6 20.1 16.1 12.6
10.1  7.5  6.0  4.5  3.5  9.5

 CHI-SQUARE =    46.6937 WITH-33 DEGREES OF FREEDOM
 |_test
 |_test kq27s=0
 |_test kq27r=0
 |_test kq27n=0
 |_test kq28s=0
 |_test kq28r=0
 |_test kq28n=0
 |_test kq29s=0
 |_test kq29r=0
 |_test kq29n=0
 |_test kq32l=0
 |_test kq32m=0
 |_test kq32g=0
 |_test kq33_a2=0
 |_test kq33_a3=0
 |_test kq33_a4=0
 |_test kq33_b2=0
 |_test kq33_b3=0
 |_test kq33_b4=0
 |_test kq342=0
```

```
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =    10.190185      WITH    57 AND 4935 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =    580.84053      WITH    57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.09813
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =    7.6874034      WITH    3 AND 4935 D.F.  P-VALUE= 0.00004
WALD CHI-SQUARE STATISTIC =    23.062210      WITH    3 D.F.  P-VALUE= 0.00004
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.13008
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =    1.2217290      WITH    3 AND 4935 D.F.  P-VALUE= 0.30008
WALD CHI-SQUARE STATISTIC =    3.6651869      WITH    3 D.F.  P-VALUE= 0.29996
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.81851
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =    3.2689936      WITH    3 AND 4935 D.F.  P-VALUE= 0.02036
WALD CHI-SQUARE STATISTIC =    9.8069807      WITH    3 D.F.  P-VALUE= 0.02028
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.30590
|_test
```

```
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_end
F STATISTIC =   3.3798053     WITH    3 AND 4935 D.F.  P-VALUE= 0.01749
WALD CHI-SQUARE STATISTIC =   10.139416     WITH    3 D.F.  P-VALUE= 0.01742
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.29588
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =  0.34544518     WITH    3 AND 4935 D.F.  P-VALUE= 0.79246
WALD CHI-SQUARE STATISTIC =   1.0363355     WITH    3 D.F.  P-VALUE= 0.79246
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =   2.5030236     WITH    3 AND 4935 D.F.  P-VALUE= 0.05745
WALD CHI-SQUARE STATISTIC =   7.5090708     WITH    3 D.F.  P-VALUE= 0.05733
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.39952
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =  0.64877317     WITH    3 AND 4935 D.F.  P-VALUE= 0.58366
WALD CHI-SQUARE STATISTIC =   1.9463195     WITH    3 D.F.  P-VALUE= 0.58362
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_end
F STATISTIC =   2.4236751     WITH    3 AND 4935 D.F.  P-VALUE= 0.06387
WALD CHI-SQUARE STATISTIC =   7.2710254     WITH    3 D.F.  P-VALUE= 0.06374
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41260
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =   15.118831     WITH    3 AND 4935 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   45.356494     WITH    3 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.06614
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =   6.9667522     WITH    3 AND 4935 D.F.  P-VALUE= 0.00011
WALD CHI-SQUARE STATISTIC =   20.900257     WITH    3 D.F.  P-VALUE= 0.00011
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.14354
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =   1.3271130     WITH    3 AND 4935 D.F.  P-VALUE= 0.26362
WALD CHI-SQUARE STATISTIC =   3.9813390     WITH    3 D.F.  P-VALUE= 0.26349
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.75352
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
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|_end
F STATISTIC =   2.9697965     WITH    3 AND 4935 D.F.  P-VALUE= 0.03062
WALD CHI-SQUARE STATISTIC =   8.9093896     WITH    3 D.F.   P-VALUE= 0.03052
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.33672
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =   1.0733855     WITH    3 AND 4935 D.F.  P-VALUE= 0.35901
WALD CHI-SQUARE STATISTIC =   3.2201565     WITH    3 D.F.   P-VALUE= 0.35891
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.93163
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
F STATISTIC =   10.158758     WITH    3 AND 4935 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   30.476273     WITH    3 D.F.   P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.09844
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   4.7959327     WITH    3 AND 4935 D.F.  P-VALUE= 0.00244
WALD CHI-SQUARE STATISTIC =   14.387798     WITH    3 D.F.   P-VALUE= 0.00242
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.20851
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =   2.3022232     WITH    3 AND 4935 D.F.  P-VALUE= 0.07507
WALD CHI-SQUARE STATISTIC =   6.9066696     WITH    3 D.F.   P-VALUE= 0.07493
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.43436
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.22432362     WITH    3 AND 4935 D.F.  P-VALUE= 0.87954
WALD CHI-SQUARE STATISTIC =  0.67297085     WITH    3 D.F.   P-VALUE= 0.87954
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =   1.4839244     WITH    3 AND 4935 D.F.  P-VALUE= 0.21677
WALD CHI-SQUARE STATISTIC =   4.4517731     WITH    3 D.F.   P-VALUE= 0.21663
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.67389
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   1.9049177     WITH    3 AND 4935 D.F.  P-VALUE= 0.12649
WALD CHI-SQUARE STATISTIC =   5.7147531     WITH    3 D.F.   P-VALUE= 0.12634
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.52496
```

```
|_*
|_* PERCENTAGE OF CALORIES FROM SATURATED FAT
|_*

|_ols pctsfat bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|     lcaldiet preglac kq2fa &
|     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat hetcov

REQUIRED MEMORY IS PAR=17820 CURRENT PAR=19000
 OLS ESTIMATION
    5026 OBSERVATIONS     DEPENDENT VARIABLE = PCTSFAT
...NOTE..SAMPLE RANGE SET TO:    1, 5649

USING HETEROSKEDASTICITY-CONSISTENT COVARIANCE MATRIX

 R-SQUARE =   0.1920     R-SQUARE ADJUSTED =   0.1773
VARIANCE OF THE ESTIMATE-SIGMA**2 =   9.9839
STANDARD ERROR OF THE ESTIMATE-SIGMA =   3.1597
SUM OF SQUARED ERRORS-SSE=   49270.
MEAN OF DEPENDENT VARIABLE =   12.811
LOG OF THE LIKELIHOOD FUNCTION = -12868.0

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE =      10.165
    (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC =   2.3189
 SCHWARZ (1978) CRITERION - LOG SC =               2.4370
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
    GENERALIZED CROSS VALIDATION - GCV =           10.168
 HANNAN AND QUINN (1979) CRITERION =               10.594
 RICE (1984) CRITERION =                           10.171
 SHIBATA (1981) CRITERION =                        10.158
 SCHWARZ (1978) CRITERION - SC =                   11.439
 AKAIKE (1974) INFORMATION CRITERION - AIC =       10.165
```

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	11707.	90.	130.08	13.029
ERROR	49270.	4935.	9.9839	P-VALUE
TOTAL	60978.	5025.	12.135	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	0.83652E+06	91.	9192.6	920.742
ERROR	49270.	4935.	9.9839	P-VALUE
TOTAL	0.88579E+06	5026.	176.24	0.000

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO 4935 DF	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
BMI_SP	0.37646E-01	0.9582E-02	3.929	0.000	0.056	0.0584	0.0780
LFATDIET	-0.90995	0.1782	-5.107	0.000	-0.073	-0.0746	-0.0064
NE	-0.52640	0.1369	-3.845	0.000	-0.055	-0.0595	-0.0079
MW	-0.71862E-01	0.1211	-0.5936	0.553	-0.008	-0.0090	-0.0014
WEST	-0.40777	0.1323	-3.082	0.002	-0.044	-0.0468	-0.0063
MSANCC	0.64959E-02	0.1103	0.5892E-01	0.953	0.001	0.0009	0.0002
NMSA	0.45150	0.1292	3.495	0.000	0.050	0.0574	0.0095

POVCAT2	-0.75632E-01	0.1358	-0.5571	0.577	-0.008	-0.0106	-0.0023
POVCAT3	0.11865	0.1520	0.7807	0.435	0.011	0.0164	0.0034
EMP	0.15247	0.1193	1.278	0.201	0.018	0.0215	0.0070
REGEX	-0.28939E-01	0.1047	-0.2764	0.782	-0.004	-0.0042	-0.0011
MODEX	-0.10322E-02	0.1448	-0.7129E-02	0.994	0.000	-0.0001	0.0000
GOODH	0.86816E-01	0.1319	0.6584	0.510	0.009	0.0093	0.0056
FSYES	-0.51837E-01	0.1775	-0.2921	0.770	-0.004	-0.0045	-0.0004
VEGEY	-0.58256	0.3190	-1.826	0.068	-0.026	-0.0276	-0.0013
WINTER	0.35504E-01	0.1333	0.2663	0.790	0.004	0.0042	0.0006
SPRING	0.79227E-02	0.1261	0.6284E-01	0.950	0.001	0.0010	0.0002
SUMMER	-0.18408	0.1253	-1.469	0.142	-0.021	-0.0238	-0.0040
WKDYWKDY	-0.42100	0.2989	-1.409	0.159	-0.020	-0.0604	-0.0160
WKDYWKED	-0.23753	0.2980	-0.7972	0.425	-0.011	-0.0341	-0.0090
AGE	0.52049E-01	0.1608E-01	3.238	0.001	0.046	0.2547	0.2057
AGE2	-0.48870E-03	0.1563E-03	-3.126	0.002	-0.044	-0.2509	-0.1088
MALE	-0.34853E-02	0.1055	-0.3305E-01	0.974	0.000	-0.0005	-0.0001
HS	-0.19115	0.1418	-1.348	0.178	-0.019	-0.0261	-0.0052
COL	-0.40433	0.1473	-2.745	0.006	-0.039	-0.0577	-0.0141
NHISP	-0.18258	0.2021	-0.9032	0.366	-0.013	-0.0138	-0.0132
BLACK	0.28838	0.1630	1.770	0.077	0.025	0.0264	0.0026
OTHER	-1.0430	0.2195	-4.752	0.000	-0.067	-0.0707	-0.0048
NVSMOKED	-0.25793	0.1192	-2.165	0.030	-0.031	-0.0370	-0.0095
SMOKEN	0.27761E-01	0.1323	0.2098	0.834	0.003	0.0035	0.0006
LCALDIET	-0.26049E-01	0.2225	-0.1170	0.907	-0.002	-0.0018	-0.0001
PREGLAC	-0.19409	0.4385	-0.4426	0.658	-0.006	-0.0050	-0.0001
KQ2FA	0.14434	0.1574	0.9171	0.359	0.013	0.0125	0.0101
KQ27S	-0.44499	0.1116	-3.989	0.000	-0.057	-0.0556	-0.0088
KQ27R	-0.44615	0.1824	-2.447	0.014	-0.035	-0.0358	-0.0030
KQ27N	-0.57091	0.2100	-2.718	0.007	-0.039	-0.0466	-0.0039
KQ28S	-0.19861	0.1260	-1.576	0.115	-0.022	-0.0277	-0.0059
KQ28R	-0.24356	0.1537	-1.585	0.113	-0.023	-0.0279	-0.0038
KQ28N	-0.25769	0.1681	-1.533	0.125	-0.022	-0.0290	-0.0038
KQ29S	-0.17245	0.3041	-0.5671	0.571	-0.008	-0.0228	-0.0041
KQ29R	-0.19902	0.3075	-0.6472	0.518	-0.009	-0.0273	-0.0055
KQ29N	-0.31538	0.3100	-1.017	0.309	-0.014	-0.0422	-0.0079
KQ32L	0.12079	0.1749	0.6908	0.490	0.010	0.0172	0.0042
KQ32M	0.38410	0.1871	2.053	0.040	0.029	0.0524	0.0103
KQ32G	0.34677	0.2188	1.585	0.113	0.023	0.0307	0.0029
KQ33_A2	0.17528E-01	0.1079	0.1625	0.871	0.002	0.0025	0.0006
KQ33_A3	0.13933	0.1539	0.9050	0.365	0.013	0.0134	0.0014
KQ33_A4	0.19808	0.1927	1.028	0.304	0.015	0.0147	0.0011
KQ33_B2	0.32178	0.1054	3.054	0.002	0.043	0.0451	0.0098
KQ33_B3	0.12672	0.1805	0.7020	0.483	0.010	0.0099	0.0008
KQ33_B4	-0.38769E-01	0.2669	-0.1452	0.885	-0.002	-0.0021	-0.0001
KQ342	0.14652	0.1546	0.9479	0.343	0.013	0.0203	0.0042
KQ343	0.25715	0.1627	1.580	0.114	0.022	0.0343	0.0064
KQ344	0.35227	0.1951	1.805	0.071	0.026	0.0366	0.0043
KQ35S	0.96008	0.4507	2.130	0.033	0.030	0.1300	0.0250
KQ35M	1.0940	0.4547	2.406	0.016	0.034	0.1567	0.0455
KQ35L	1.0781	0.4720	2.284	0.022	0.032	0.0966	0.0092
KQ372	0.49289	0.1133	4.352	0.000	0.062	0.0678	0.0138
KQ373	0.74717	0.1342	5.568	0.000	0.079	0.0884	0.0126
KQ374	0.89862	0.1712	5.248	0.000	0.074	0.0824	0.0081
KQ30S	-0.37386	0.1681	-2.224	0.026	-0.032	-0.0533	-0.0129
KQ30R	-0.38354	0.1856	-2.067	0.039	-0.029	-0.0496	-0.0085
KQ30N	-0.90534	0.2043	-4.432	0.000	-0.063	-0.1007	-0.0130
KQ31S	0.21737E-01	0.1128	0.1927	0.847	0.003	0.0028	0.0005
KQ31R	0.22530	0.1850	1.218	0.223	0.017	0.0178	0.0014
KQ31N	0.26643	0.1452	1.834	0.067	0.026	0.0297	0.0038
KQ36S	-0.24599E-01	0.1205	-0.2041	0.838	-0.003	-0.0029	-0.0004
KQ36R	0.41585	0.2320	1.793	0.073	0.026	0.0238	0.0013
KQ36N	0.52734	0.2135	2.470	0.014	0.035	0.0411	0.0033
KQ26_AA	-0.11525	0.1433	-0.8042	0.421	-0.011	-0.0136	-0.0019
KQ26_AS	0.73330E-01	0.1258	0.5830	0.560	0.008	0.0101	0.0021
KQ26_AR	0.19791	0.1568	1.262	0.207	0.018	0.0200	0.0022
KQ26_BA	-0.50185	0.1230	-4.080	0.000	-0.058	-0.0689	-0.0139
KQ26_BS	0.84220E-01	0.1525	0.5523	0.581	0.008	0.0084	0.0009

```
 KQ26_BR  -0.17694      0.1610       -1.099      0.272-0.016     -0.0163      -0.0016
 KQ26_CA  -0.34909      0.1693       -2.062      0.039-0.029     -0.0357      -0.0041
 KQ26_CS  -0.30711      0.1376       -2.232      0.026-0.032     -0.0385      -0.0062
 KQ26_CR   0.11639      0.1465       0.7942      0.427 0.011      0.0128       0.0016
 KQ26_DA  -0.25201      0.1648       -1.529      0.126-0.022     -0.0274      -0.0034
 KQ26_DS   0.26588E-01  0.1257       0.2116      0.832 0.003      0.0037       0.0008
 KQ26_DR   0.56513E-01  0.1533       0.3686      0.712 0.005      0.0057       0.0006
 KQ26_EA   0.45422E-01  0.1502       0.3024      0.762 0.004      0.0058       0.0010
 KQ26_ES   0.98640E-01  0.1340       0.7361      0.462 0.010      0.0132       0.0024
 KQ26_ER   0.51139E-01  0.1754       0.2916      0.771 0.004      0.0045       0.0004
 KQ26_GA  -0.53613      0.2647       -2.025      0.043-0.029     -0.0577      -0.0071
 KQ26_GS  -0.24116      0.2426      -0.9940      0.320-0.014     -0.0322      -0.0129
 KQ26_GR  -0.28033      0.2729       -1.027      0.304-0.015     -0.0234      -0.0020
 KQ26_FA  -0.48530      0.2028       -2.393      0.017-0.034     -0.0505      -0.0059
 KQ26_FS  -0.99614E-01  0.1722      -0.5784      0.563-0.008     -0.0140      -0.0047
 KQ26_FR  -0.11979E-03  0.2010      -0.5960E-03 1.000 0.000      0.0000       0.0000
 CONSTANT   10.906      0.8591        12.69      0.000 0.178      0.0000       0.8513

 DURBIN-WATSON = 1.9167    VON NEUMANN RATIO = 1.9171    RHO =  0.04130
 RESIDUAL SUM = -0.15083E-09  RESIDUAL VARIANCE =   9.9839
 SUM OF ABSOLUTE ERRORS=   12471.
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.1920
 RUNS TEST: 2483 RUNS, 2474 POS,    0 ZERO, 2552 NEG  NORMAL STATISTIC = -0.8578
 COEFFICIENT OF SKEWNESS =   0.1668 WITH STANDARD DEVIATION OF 0.0345
 COEFFICIENT OF EXCESS KURTOSIS =   0.3711 WITH STANDARD DEVIATION OF 0.0691

      GOODNESS OF FIT TEST FOR NORMALITY OF RESIDUALS - 60 GROUPS
 OBSERVED  8.0  3.0  5.0  2.0  6.0  8.0  7.0  7.0 14.0 26.0 36.0 28.0 32.0 55.0
60.0 77.0 68.0 93.0104.0140.0

117.0149.0179.0158.0183.0200.0186.0207.0197.0197.0210.0171.0216.0200.0178.0160.0
170.0155.0144.0116.0
          103.0 93.0 91.0 66.0 72.0 45.0 58.0 43.0 35.0 23.0 19.0 18.0 20.0  8.0
11.0 12.0  8.0  6.0  2.0 21.0

 EXPECTED  9.5  3.5  4.5  6.0  7.5 10.1 12.6 16.1 20.1 24.6 29.7 36.2 43.7 51.3
60.3 70.4 80.4 92.0103.5115.6

127.7139.7151.3162.3171.9181.4188.5194.0198.5200.0200.0198.5194.0188.5181.4171.9
162.3151.3139.7127.7
          115.6103.5 92.0 80.4 70.4 60.3 51.3 43.7 36.2 29.7 24.6 20.1 16.1 12.6
10.1  7.5  6.0  4.5  3.5  9.5

 CHI-SQUARE =    81.7444 WITH-33 DEGREES OF FREEDOM
 |_test
 |_test kq27s=0
 |_test kq27r=0
 |_test kq27n=0
 |_test kq28s=0
 |_test kq28r=0
 |_test kq28n=0
 |_test kq29s=0
 |_test kq29r=0
 |_test kq29n=0
 |_test kq32l=0
 |_test kq32m=0
 |_test kq32g=0
 |_test kq33_a2=0
 |_test kq33_a3=0
 |_test kq33_a4=0
 |_test kq33_b2=0
 |_test kq33_b3=0
 |_test kq33_b4=0
 |_test kq342=0
 |_test kq343=0
 |_test kq344=0
 |_test kq35s=0
```

```
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =    9.4233209     WITH   57 AND 4935 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   537.12929     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.10612
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
F STATISTIC =    6.8842969     WITH    3 AND 4935 D.F.  P-VALUE= 0.00013
WALD CHI-SQUARE STATISTIC =   20.652891     WITH    3 D.F.  P-VALUE= 0.00012
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.14526
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
F STATISTIC =    1.1880792     WITH    3 AND 4935 D.F.  P-VALUE= 0.31264
WALD CHI-SQUARE STATISTIC =   3.5642377     WITH    3 D.F.  P-VALUE= 0.31253
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.84169
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
F STATISTIC =  0.66179715     WITH    3 AND 4935 D.F.  P-VALUE= 0.57549
WALD CHI-SQUARE STATISTIC =   1.9853915     WITH    3 D.F.  P-VALUE= 0.57544
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
```

```
|_end
F STATISTIC =   2.6435081      WITH    3 AND 4935 D.F.  P-VALUE= 0.04759
WALD CHI-SQUARE STATISTIC =   7.9305244      WITH    3 D.F.  P-VALUE= 0.04747
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.37829
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
F STATISTIC =  0.56535896      WITH    3 AND 4935 D.F.  P-VALUE= 0.63783
WALD CHI-SQUARE STATISTIC =   1.6960769      WITH    3 D.F.  P-VALUE= 0.63781
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
F STATISTIC =   3.4120439      WITH    3 AND 4935 D.F.  P-VALUE= 0.01674
WALD CHI-SQUARE STATISTIC =   10.236132      WITH    3 D.F.  P-VALUE= 0.01666
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.29308
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
F STATISTIC =   1.3209013      WITH    3 AND 4935 D.F.  P-VALUE= 0.26565
WALD CHI-SQUARE STATISTIC =   3.9627039      WITH    3 D.F.  P-VALUE= 0.26552
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.75706
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq35l=0
|_end
F STATISTIC =   2.1903914      WITH    3 AND 4935 D.F.  P-VALUE= 0.08704
WALD CHI-SQUARE STATISTIC =   6.5711743      WITH    3 D.F.  P-VALUE= 0.08690
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.45654
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
F STATISTIC =   13.908962      WITH    3 AND 4935 D.F.  P-VALUE= 0.00000
WALD CHI-SQUARE STATISTIC =   41.726886      WITH    3 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.07190
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
F STATISTIC =   7.5245984      WITH    3 AND 4935 D.F.  P-VALUE= 0.00005
WALD CHI-SQUARE STATISTIC =   22.573795      WITH    3 D.F.  P-VALUE= 0.00005
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.13290
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
F STATISTIC =   1.4791276      WITH    3 AND 4935 D.F.  P-VALUE= 0.21809
WALD CHI-SQUARE STATISTIC =   4.4373828      WITH    3 D.F.  P-VALUE= 0.21794
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.67607
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
F STATISTIC =   3.0682355      WITH    3 AND 4935 D.F.  P-VALUE= 0.02678
WALD CHI-SQUARE STATISTIC =   9.2047064      WITH    3 D.F.  P-VALUE= 0.02669
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UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.32592
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
F STATISTIC =   1.2725190     WITH    3 AND 4935 D.F.  P-VALUE= 0.28198
WALD CHI-SQUARE STATISTIC =   3.8175570     WITH    3 D.F.  P-VALUE= 0.28185
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.78584
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
F STATISTIC =   7.3280993     WITH    3 AND 4935 D.F.  P-VALUE= 0.00007
WALD CHI-SQUARE STATISTIC =   21.984298     WITH    3 D.F.  P-VALUE= 0.00007
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.13646
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =   3.9077389     WITH    3 AND 4935 D.F.  P-VALUE= 0.00844
WALD CHI-SQUARE STATISTIC =   11.723217     WITH    3 D.F.  P-VALUE= 0.00839
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.25590
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =   1.3175027     WITH    3 AND 4935 D.F.  P-VALUE= 0.26677
WALD CHI-SQUARE STATISTIC =   3.9525082     WITH    3 D.F.  P-VALUE= 0.26664
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.75901
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.18884673     WITH    3 AND 4935 D.F.  P-VALUE= 0.90404
WALD CHI-SQUARE STATISTIC =  0.56654019     WITH    3 D.F.  P-VALUE= 0.90405
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =   2.0882712     WITH    3 AND 4935 D.F.  P-VALUE= 0.09956
WALD CHI-SQUARE STATISTIC =   6.2648136     WITH    3 D.F.  P-VALUE= 0.09941
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.47887
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   3.4281619     WITH    3 AND 4935 D.F.  P-VALUE= 0.01637
WALD CHI-SQUARE STATISTIC =   10.284486     WITH    3 D.F.  P-VALUE= 0.01630
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.29170
```

```
|_*
|_* DIETARY GUIDELINE FOR FAT
|_*

|_logit fatdgy bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|      emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|      wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|      lcaldiet preglac kq2fa &
|      kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|      kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|      kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|      kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|      kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|      kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|      kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|      kq26_fa kq26_fs kq26_fr / rstat iter=100

REQUIRED MEMORY IS PAR=14235 CURRENT PAR=19000
FOR MAXIMUM EFFICIENCY USE AT LEAST PAR= 17847
 LOGIT ANALYSIS     DEPENDENT VARIABLE =FATDGY   CHOICES =  2
    5026. TOTAL OBSERVATIONS
    1719. OBSERVATIONS AT ONE
    3307. OBSERVATIONS AT ZERO
 100 MAXIMUM ITERATIONS
CONVERGENCE TOLERANCE =0.00100

LOG OF LIKELIHOOD WITH CONSTANT TERM ONLY =    -3228.5
BINOMIAL  ESTIMATE = 0.3420
ITERATION  0      LOG OF LIKELIHOOD FUNCTION =   -3228.5

ITERATION  1 ESTIMATES
-0.19595E-01 0.30869     0.15261    -0.10413E-01 0.14135    -0.39038E-01
-0.12049    -0.94526E-02-0.10168    -0.23179     0.56993E-01-0.96386E-02
-0.23684E-01-0.20588E-01 0.14177    -0.17252E-01-0.68866E-01 0.58932E-01
 0.18580     0.91976E-01-0.19458E-01 0.17089E-03 0.79869E-01 0.47588E-02
 0.11430     0.15920    -0.66241E-02 0.57318     0.12319    -0.44111E-01
 0.25279     0.17174    -0.20854     0.99858E-01 0.17473     0.25658
 0.66333E-01 0.16854     0.52582E-01 0.21341     0.18284     0.34499
-0.43945E-01-0.18964    -0.12005    -0.63477E-01-0.97021E-01-0.85083E-01
-0.42724E-01 0.66917E-01 0.26289    -0.92983E-01-0.14086    -0.10813
-0.78121    -0.84603    -0.85882    -0.31602    -0.33502    -0.55065
 0.62394E-01 0.43154E-01 0.31717    -0.68445E-01-0.57292E-01-0.15087
 0.68560E-02-0.30540    -0.33186     0.91218E-01-0.38545E-02 0.77425E-02
 0.30773     0.32375E-03-0.49056E-01 0.31634     0.23290     0.26384E-01
 0.23278     0.27450E-01 0.37280E-01 0.50554E-01-0.14791E-01-0.65540E-01
 0.24247     0.14697     0.82370E-01 0.76088E-01-0.86169E-01-0.30232E-01
 0.73818
ITERATION  1      LOG OF LIKELIHOOD FUNCTION =   -2901.1

ITERATION  2 ESTIMATES
-0.22742E-01 0.30562     0.17493    -0.14967E-01 0.16711    -0.39121E-01
-0.13487    -0.21864E-01-0.12549    -0.26433     0.62284E-01-0.25419E-02
-0.30063E-01-0.29447E-01 0.15505    -0.24354E-01-0.76601E-01 0.69424E-01
 0.21802     0.11280    -0.22634E-01 0.19918E-03 0.97116E-01-0.19356E-02
 0.12255     0.17720     0.42319E-02 0.61615     0.13739    -0.51114E-01
 0.27331     0.17924    -0.23931     0.10888     0.16877     0.26366
 0.80495E-01 0.19225     0.60924E-01 0.32164     0.29154     0.47004
-0.47674E-01-0.21091    -0.14038    -0.73819E-01-0.11736    -0.10034
-0.53572E-01 0.71195E-01 0.30602    -0.83187E-01-0.13022    -0.11217
-0.91433    -0.98150    -1.0175     -0.33180    -0.35631    -0.66943
 0.85280E-01 0.72162E-01 0.33730    -0.73795E-01-0.60931E-01-0.17041
-0.29900E-02-0.39795    -0.45932     0.95597E-01 0.64504E-02 0.11325E-01
 0.32702     0.26738E-02-0.69492E-01 0.32420     0.25640     0.33764E-01
 0.23813     0.34471E-01 0.40448E-01 0.51841E-01-0.54694E-02-0.74990E-01
 0.26559     0.17118     0.84135E-01 0.71754E-01-0.10216    -0.43426E-01
 0.82873
ITERATION  2      LOG OF LIKELIHOOD FUNCTION =   -2895.1
```

```
ITERATION  3 ESTIMATES
-0.22945E-01 0.30591      0.17604     -0.15458E-01 0.16831     -0.39141E-01
-0.13555     -0.22812E-01-0.12690     -0.26605      0.62383E-01-0.22541E-02
-0.30462E-01-0.30250E-01 0.15666     -0.24821E-01-0.77180E-01 0.70081E-01
 0.22036      0.11451     -0.22843E-01 0.20106E-03 0.98208E-01-0.22565E-02
 0.12292      0.17802      0.54389E-02 0.61926      0.13811     -0.51436E-01
 0.27480      0.17950     -0.24097      0.10921      0.16847      0.26427
 0.81472E-01 0.19378      0.61500E-01 0.33613      0.30604      0.48533
-0.48067E-01-0.21217     -0.14246     -0.74449E-01-0.11865     -0.10145
-0.54160E-01 0.71203E-01 0.30817     -0.82788E-01-0.12961     -0.11333
-0.92935     -0.99650     -1.0351     -0.33252     -0.35715     -0.68050
 0.87701E-01 0.74773E-01 0.34003     -0.73825E-01-0.60864E-01-0.17173
-0.35573E-02-0.40554     -0.47432      0.95971E-01 0.72883E-02 0.11858E-01
 0.32811      0.27620E-02-0.70871E-01 0.32510      0.25760      0.34277E-01
 0.23859      0.34873E-01 0.40506E-01 0.51978E-01-0.47921E-02-0.75460E-01
 0.26683      0.17240      0.83615E-01 0.71523E-01-0.10320     -0.44361E-01
 0.83484
ITERATION  3      LOG OF LIKELIHOOD FUNCTION =   -2895.1
```

```
ITERATION  4 ESTIMATES
-0.22945E-01 0.30591      0.17604     -0.15461E-01 0.16831     -0.39141E-01
-0.13555     -0.22817E-01-0.12691     -0.26606      0.62382E-01-0.22540E-02
-0.30464E-01-0.30256E-01 0.15667     -0.24823E-01-0.77184E-01 0.70083E-01
 0.22037      0.11452     -0.22845E-01 0.20107E-03 0.98212E-01-0.22559E-02
 0.12293      0.17802      0.54479E-02 0.61927      0.13811     -0.51436E-01
 0.27480      0.17949     -0.24098      0.10921      0.16847      0.26427
 0.81477E-01 0.19379      0.61503E-01 0.33627      0.30618      0.48547
-0.48069E-01-0.21218     -0.14248     -0.74452E-01-0.11865     -0.10146
-0.54161E-01 0.71202E-01 0.30817     -0.82786E-01-0.12961     -0.11334
-0.92948     -0.99663     -1.0353     -0.33252     -0.35715     -0.68057
 0.87717E-01 0.74789E-01 0.34005     -0.73824E-01-0.60861E-01-0.17174
-0.35585E-02-0.40558     -0.47445      0.95974E-01 0.72934E-02 0.11863E-01
 0.32811      0.27621E-02-0.70876E-01 0.32511      0.25761      0.34279E-01
 0.23859      0.34875E-01 0.40506E-01 0.51978E-01-0.47897E-02-0.75462E-01
 0.26684      0.17241      0.83612E-01 0.71523E-01-0.10320     -0.44366E-01
 0.83485
```

VARIABLE NAME	ESTIMATED COEFFICIENT	ASYMPTOTIC STANDARD ERROR	T-RATIO	ELASTICITY AT MEANS	WEIGHTED AGGREGATE ELASTICITY
BMI_SP	-0.22945E-01	0.66430E-02	-3.4541	-0.41273	-0.30784
LFATDIET	0.30591	0.11525	2.6542	0.18559E-01	0.15630E-01
NE	0.17604	0.95469E-01	1.8440	0.22880E-01	0.18336E-01
MW	-0.15461E-01	0.87735E-01	-0.17623	-0.26619E-02	-0.19387E-02
WEST	0.16831	0.94660E-01	1.7781	0.22737E-01	0.18078E-01
MSANCC	-0.39141E-01	0.79537E-01	-0.49212	-0.11646E-01	-0.89511E-02
NMSA	-0.13555	0.93577E-01	-1.4486	-0.24653E-01	-0.17278E-01
POVCAT2	-0.22817E-01	0.95668E-01	-0.23850	-0.59371E-02	-0.44712E-02
POVCAT3	-0.12691	0.10856	-1.1690	-0.31277E-01	-0.23928E-01
EMP	-0.26606	0.83659E-01	-3.1802	-0.10643	-0.77553E-01
REGEX	0.62382E-01	0.74927E-01	0.83256	0.20521E-01	0.15765E-01
MODEX	-0.22540E-02	0.10938	-0.20607E-01	-0.18993E-03	-0.14186E-03
GOODH	-0.30464E-01	0.94023E-01	-0.32401	-0.17197E-01	-0.12974E-01
FSYES	-0.30256E-01	0.12786	-0.23663	-0.21334E-02	-0.15174E-02
VEGEY	0.15667	0.20460	0.76575	0.29782E-02	0.25088E-02
WINTER	-0.24823E-01	0.95179E-01	-0.26080	-0.37549E-02	-0.28138E-02
SPRING	-0.77184E-01	0.92702E-01	-0.83261	-0.13278E-01	-0.98196E-02
SUMMER	0.70083E-01	0.89556E-01	0.78257	0.13379E-01	0.10327E-01
WKDYWKDY	0.22037	0.20094	1.0967	0.72850E-01	0.55745E-01
WKDYWKED	0.11452	0.20094	0.56994	0.37488E-01	0.27866E-01
AGE	-0.22845E-01	0.11959E-01	-1.9102	-0.78362	-0.59402
AGE2	0.20107E-03	0.11541E-03	1.7422	0.38874	0.29728
MALE	0.98212E-01	0.74666E-01	1.3154	0.33871E-01	0.24524E-01
HS	-0.22559E-02	0.98641E-01	-0.22870E-01	-0.52920E-03	-0.37777E-03

COL	0.12293	0.10371	1.1852	0.37206E-01	0.29340E-01
NHISP	0.17802	0.13950	1.2761	0.11153	0.83679E-01
BLACK	0.54479E-02	0.11645	0.46784E-01	0.42306E-03	0.29893E-03
OTHER	0.61927	0.15151	4.0873	0.24880E-01	0.21072E-01
NVSMOKED	0.13811	0.85559E-01	1.6142	0.43999E-01	0.34775E-01
SMOKEN	-0.51436E-01	0.96692E-01	-0.53196	-0.94311E-02	-0.70967E-02
LCALDIET	0.27480	0.13328	2.0619	0.11559E-01	0.96464E-02
PREGLAC	0.17949	0.35021	0.51253	0.99218E-03	0.81266E-03
KQ2FA	-0.24098	0.10989	-2.1929	-0.14678	-0.11053
KQ27S	0.10921	0.81058E-01	1.3473	0.18831E-01	0.15129E-01
KQ27R	0.16847	0.12198	1.3811	0.97667E-02	0.83161E-02
KQ27N	0.26427	0.13425	1.9685	0.15855E-01	0.13108E-01
KQ28S	0.81477E-01	0.93927E-01	0.86745	0.21168E-01	0.15739E-01
KQ28R	0.19379	0.11094	1.7469	0.26101E-01	0.21387E-01
KQ28N	0.61503E-01	0.11787	0.52181	0.79021E-02	0.63728E-02
KQ29S	0.33627	0.25922	1.2973	0.69048E-01	0.48262E-01
KQ29R	0.30618	0.26004	1.1775	0.73395E-01	0.56041E-01
KQ29N	0.48547	0.26072	1.8620	0.10518	0.84975E-01
KQ32L	-0.48069E-01	0.11407	-0.42139	-0.14413E-01	-0.11661E-01
KQ32M	-0.21218	0.12423	-1.7079	-0.49489E-01	-0.34527E-01
KQ32G	-0.14248	0.15724	-0.90612	-0.10277E-01	-0.65068E-02
KQ33_A2	-0.74452E-01	0.75750E-01	-0.98287	-0.21932E-01	-0.16131E-01
KQ33_A3	-0.11865	0.11280	-1.0519	-0.10270E-01	-0.71944E-02
KQ33_A4	-0.10146	0.14248	-0.71208	-0.49381E-02	-0.34786E-02
KQ33_B2	-0.54161E-01	0.75782E-01	-0.71470	-0.14363E-01	-0.10251E-01
KQ33_B3	0.71202E-01	0.13671	0.52083	0.38782E-02	0.26225E-02
KQ33_B4	0.30817	0.19040	1.6185	0.75201E-02	0.54109E-02
KQ342	-0.82786E-01	0.10282	-0.80514	-0.20670E-01	-0.16335E-01
KQ343	-0.12961	0.11190	-1.1583	-0.27818E-01	-0.20060E-01
KQ344	-0.11334	0.13668	-0.82920	-0.11903E-01	-0.76558E-02
KQ35S	-0.92948	0.29496	-3.1512	-0.21015	-0.17264
KQ35M	-0.99663	0.29734	-3.3518	-0.36010	-0.26454
KQ35L	-1.0353	0.31170	-3.3214	-0.76768E-01	-0.47793E-01
KQ372	-0.33252	0.78064E-01	-4.2596	-0.80651E-01	-0.61725E-01
KQ373	-0.35715	0.94410E-01	-3.7829	-0.52484E-01	-0.37041E-01
KQ374	-0.68057	0.12982	-5.2423	-0.53126E-01	-0.30071E-01
KQ30S	0.87717E-01	0.13250	0.66200	0.26254E-01	0.18697E-01
KQ30R	0.74789E-01	0.14198	0.52675	0.14379E-01	0.11462E-01
KQ30N	0.34005	0.14973	2.2711	0.42361E-01	0.35944E-01
KQ31S	-0.73824E-01	0.81672E-01	-0.90390	-0.14113E-01	-0.10423E-01
KQ31R	-0.60861E-01	0.13281	-0.45827	-0.33970E-02	-0.23371E-02
KQ31N	-0.17174	0.10478	-1.6391	-0.21510E-01	-0.13948E-01
KQ36S	-0.35585E-02	0.88039E-01	-0.40420E-01	-0.50278E-03	-0.35153E-03
KQ36R	-0.40558	0.18705	-2.1683	-0.11373E-01	-0.66714E-02
KQ36N	-0.47445	0.17482	-2.7140	-0.25714E-01	-0.15605E-01
KQ26_AA	0.95974E-01	0.10192	0.94169	0.13948E-01	0.11617E-01
KQ26_AS	0.72934E-02	0.92046E-01	0.79236E-01	0.17748E-02	0.13426E-02
KQ26_AR	0.11863E-01	0.11545	0.10276	0.11644E-02	0.81331E-03
KQ26_BA	0.32811	0.87461E-01	3.7515	0.78829E-01	0.67031E-01
KQ26_BS	0.27621E-02	0.11040	0.25019E-01	0.26327E-03	0.19584E-03
KQ26_BR	-0.70876E-01	0.12286	-0.57691	-0.55900E-02	-0.37864E-02
KQ26_CA	0.32511	0.11511	2.8242	0.32961E-01	0.28194E-01
KQ26_CS	0.25761	0.95990E-01	2.6837	0.44872E-01	0.36884E-01
KQ26_CR	0.34279E-01	0.10826	0.31664	0.41547E-02	0.29616E-02
KQ26_DA	0.23859	0.11012	2.1667	0.28049E-01	0.23583E-01
KQ26_DS	0.34875E-01	0.90384E-01	0.38585	0.87078E-02	0.67663E-02
KQ26_DR	0.40506E-01	0.11564	0.35027	0.39756E-02	0.28394E-02
KQ26_EA	0.51978E-01	0.10495	0.49526	0.95795E-02	0.80867E-02
KQ26_ES	-0.47897E-02	0.98335E-01	-0.48708E-01	-0.10293E-02	-0.78374E-03
KQ26_ER	-0.75462E-01	0.13355	-0.56505	-0.53514E-02	-0.36462E-02
KQ26_GA	0.26684	0.18020	1.4808	0.30615E-01	0.25470E-01
KQ26_GS	0.17241	0.16690	1.0330	0.80052E-01	0.60168E-01
KQ26_GR	0.83612E-01	0.19598	0.42664	0.52643E-02	0.34736E-02
KQ26_FA	0.71523E-01	0.14236	0.50242	0.75406E-02	0.62737E-02
KQ26_FS	-0.10320	0.12369	-0.83438	-0.42437E-01	-0.31715E-01
KQ26_FR	-0.44366E-01	0.14569	-0.30453	-0.43844E-02	-0.31351E-02
CONSTANT	0.83485	0.60803	1.3730	0.56570	0.42583

```
LOG-LIKELIHOOD FUNCTION =  -2895.1
LOG-LIKELIHOOD(0)   =    -3228.5
LIKELIHOOD RATIO TEST  =     666.949    WITH    90  D.F.

MADDALA R-SQUARE              0.1243
CRAGG-UHLER R-SQUARE          0.17182
MCFADDEN R-SQUARE             0.10329
     ADJUSTED FOR DEGREES OF FREEDOM          0.86936E-01
     APPROXIMATELY F-DISTRIBUTED    0.11647      WITH       90  AND    91  D.F.
CHOW R-SQUARE                 0.13136

         PREDICTION SUCCESS TABLE
                       ACTUAL
                  0             1

        0   2964.         1108.
PREDICTED 1    343.          611.

NUMBER OF RIGHT PREDICTIONS =        0.358E+04
PERCENTAGE OF RIGHT PREDICTIONS =     0.71130

EXPECTED OBSERVATIONS AT 0  =        3096.0   OBSERVED =   3307.0
EXPECTED OBSERVATIONS AT 1  =        1930.0   OBSERVED =   1719.0
SUM OF SQUARED "RESIDUALS" =            982.48
WEIGHTED SUM OF SQUARED "RESIDUALS" =      5060.8

HENSHER-JOHNSON PREDICTION SUCCESS TABLE
                                                  OBSERVED    OBSERVED
                       PREDICTED  CHOICE            COUNT       SHARE
        ACTUAL             0          1
          0            2323.549    983.451   3307.000      0.658
          1             983.451    735.549   1719.000      0.342

PREDICTED COUNT        3307.000   1719.000   5026.000      1.000
PREDICTED SHARE           0.658      0.342      1.000
PROP. SUCCESSFUL          0.703      0.428      0.609
SUCCESS INDEX             0.045      0.086      0.059
PROPORTIONAL ERROR        0.000      0.000
NORMALIZED SUCCESS INDEX                        0.131

DURBIN-WATSON = 2.0115    VON NEUMANN RATIO = 2.0119    RHO = -0.00582
RESIDUAL SUM = -0.69398E-06  RESIDUAL VARIANCE =  0.19548
SUM OF ABSOLUTE ERRORS=   1966.9
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.1314
LOG-LIKELIHOOD FUNCTION =    -2895.063
RUNS TEST: 2229 RUNS, 1719 POS,     0 ZERO, 3307 NEG  NORMAL STATISTIC = -1.0698
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
```

```
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =   333.25844     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.17104
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
WALD CHI-SQUARE STATISTIC =   5.0663537     WITH    3 D.F.  P-VALUE= 0.16700
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.59214
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
WALD CHI-SQUARE STATISTIC =   3.3347947     WITH    3 D.F.  P-VALUE= 0.34283
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.89961
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
WALD CHI-SQUARE STATISTIC =   7.1377643     WITH    3 D.F.  P-VALUE= 0.06763
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.42030
|_test
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
```

```
|_end
WALD CHI-SQUARE STATISTIC =   5.2686882     WITH    3 D.F.   P-VALUE= 0.15315
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.56940
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
WALD CHI-SQUARE STATISTIC =   1.5904746     WITH    3 D.F.   P-VALUE= 0.66155
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
WALD CHI-SQUARE STATISTIC =   4.2195230     WITH    3 D.F.   P-VALUE= 0.23871
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.71098
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
WALD CHI-SQUARE STATISTIC =   1.3646889     WITH    3 D.F.   P-VALUE= 0.71383
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_end
WALD CHI-SQUARE STATISTIC =   11.771747     WITH    3 D.F.   P-VALUE= 0.00821
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.25485
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
WALD CHI-SQUARE STATISTIC =   36.006377     WITH    3 D.F.   P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.08332
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
WALD CHI-SQUARE STATISTIC =   9.5471365     WITH    3 D.F.   P-VALUE= 0.02284
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.31423
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
WALD CHI-SQUARE STATISTIC =   2.8418837     WITH    3 D.F.   P-VALUE= 0.41665
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
WALD CHI-SQUARE STATISTIC =   11.559020     WITH    3 D.F.   P-VALUE= 0.00906
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.25954
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
WALD CHI-SQUARE STATISTIC =   1.1598213     WITH    3 D.F.   P-VALUE= 0.76266
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
```

```
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
WALD CHI-SQUARE STATISTIC =   20.699509     WITH    3 D.F.  P-VALUE= 0.00012
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.14493
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
WALD CHI-SQUARE STATISTIC =   12.189529     WITH    3 D.F.  P-VALUE= 0.00676
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24611
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
WALD CHI-SQUARE STATISTIC =   5.4771393     WITH    3 D.F.  P-VALUE= 0.14001
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.54773
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
WALD CHI-SQUARE STATISTIC =  0.94719841     WITH    3 D.F.  P-VALUE= 0.81403
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
WALD CHI-SQUARE STATISTIC =   2.9315378     WITH    3 D.F.  P-VALUE= 0.40230
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =   3.7814242     WITH    3 D.F.  P-VALUE= 0.28605
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.79335
|_*
|_stop
```

```
EXPECTED OBSERVATIONS AT 0  =        1006.4   OBSERVED =   1080.0
EXPECTED OBSERVATIONS AT 1  =         673.6   OBSERVED =    600.0
SUM OF SQUARED "RESIDUALS" =            323.04
WEIGHTED SUM OF SQUARED "RESIDUALS" =     1702.0

HENSHER-JOHNSON PREDICTION SUCCESS TABLE
                                             OBSERVED    OBSERVED
                   PREDICTED  CHOICE           COUNT       SHARE
       ACTUAL          0          1
         0          756.582    323.418    1080.000       0.643
         1          323.418    276.582     600.000       0.357

PREDICTED COUNT     1080.000    600.000    1680.000       1.000
PREDICTED SHARE        0.643      0.357       1.000
PROP. SUCCESSFUL       0.701      0.461       0.615
SUCCESS INDEX          0.058      0.104       0.074
PROPORTIONAL ERROR     0.000      0.000
NORMALIZED SUCCESS INDEX                      0.162

DURBIN-WATSON = 1.9799    VON NEUMANN RATIO = 1.9811    RHO =  0.00983
RESIDUAL SUM = -0.14110E-04  RESIDUAL VARIANCE =  0.19229
SUM OF ABSOLUTE ERRORS=   646.84
R-SQUARE BETWEEN OBSERVED AND PREDICTED = 0.1625
LOG-LIKELIHOOD FUNCTION =   -953.6412
RUNS TEST:  756 RUNS,  600 POS,    0 ZERO, 1080 NEG  NORMAL STATISTIC = -0.8732
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_test kq321=0
|_test kq32m=0
|_test kq32g=0
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_test kq26_ba=0
```

```
WALD CHI-SQUARE STATISTIC =   1.3091904     WITH    3 D.F.  P-VALUE= 0.72695
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq35s=0
|_test kq35m=0
|_test kq351=0
|_end
WALD CHI-SQUARE STATISTIC =   2.0010767     WITH    3 D.F.  P-VALUE= 0.57218
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq372=0
|_test kq373=0
|_test kq374=0
|_end
WALD CHI-SQUARE STATISTIC =   12.231182     WITH    3 D.F.  P-VALUE= 0.00663
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.24527
|_test
|_test kq30s=0
|_test kq30r=0
|_test kq30n=0
|_end
WALD CHI-SQUARE STATISTIC =   2.2887919     WITH    3 D.F.  P-VALUE= 0.51467
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq31s=0
|_test kq31r=0
|_test kq31n=0
|_end
WALD CHI-SQUARE STATISTIC =   2.2261732     WITH    3 D.F.  P-VALUE= 0.52681
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq36s=0
|_test kq36r=0
|_test kq36n=0
|_end
WALD CHI-SQUARE STATISTIC =   1.8915350     WITH    3 D.F.  P-VALUE= 0.59522
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_aa=0
|_test kq26_as=0
|_test kq26_ar=0
|_end
WALD CHI-SQUARE STATISTIC =   2.2814338     WITH    3 D.F.  P-VALUE= 0.51609
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ba=0
|_test kq26_bs=0
|_test kq26_br=0
|_end
WALD CHI-SQUARE STATISTIC =   5.2056889     WITH    3 D.F.  P-VALUE= 0.15734
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.57629
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
WALD CHI-SQUARE STATISTIC =   1.4565629     WITH    3 D.F.  P-VALUE= 0.69233
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
WALD CHI-SQUARE STATISTIC =   4.8795340     WITH    3 D.F.  P-VALUE= 0.18083
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.61481
|_test
|_test kq26_ea=0
```

```
|_test kq26_bs=0
|_test kq26_br=0
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
WALD CHI-SQUARE STATISTIC =   137.54541     WITH   57 D.F.  P-VALUE= 0.00000
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41441
|_test
|_test kq27s=0
|_test kq27r=0
|_test kq27n=0
|_end
WALD CHI-SQUARE STATISTIC =   1.0126912     WITH    3 D.F.  P-VALUE= 0.79818
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq28s=0
|_test kq28r=0
|_test kq28n=0
|_end
WALD CHI-SQUARE STATISTIC =   9.8898404     WITH    3 D.F.  P-VALUE= 0.01953
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.30334
|_test
|_test kq29s=0
|_test kq29r=0
|_test kq29n=0
|_end
WALD CHI-SQUARE STATISTIC =   7.2639870     WITH    3 D.F.  P-VALUE= 0.06394
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.41300
|_test
|_test kq32l=0
|_test kq32m=0
|_test kq32g=0
|_end
WALD CHI-SQUARE STATISTIC =   10.713700     WITH    3 D.F.  P-VALUE= 0.01338
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.28002
|_test
|_test kq33_a2=0
|_test kq33_a3=0
|_test kq33_a4=0
|_end
WALD CHI-SQUARE STATISTIC =   7.9065999     WITH    3 D.F.  P-VALUE= 0.04798
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.37943
|_test
|_test kq33_b2=0
|_test kq33_b3=0
|_test kq33_b4=0
|_end
WALD CHI-SQUARE STATISTIC =  0.53809159     WITH    3 D.F.  P-VALUE= 0.91045
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq342=0
|_test kq343=0
|_test kq344=0
|_end
```

```
|_test kq26_br=0
|_end
F STATISTIC =   1.9357370     WITH    3 AND 1589 D.F.  P-VALUE= 0.12184
WALD CHI-SQUARE STATISTIC =   5.8072109     WITH    3 D.F.  P-VALUE= 0.12138
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.51660
|_test
|_test kq26_ca=0
|_test kq26_cs=0
|_test kq26_cr=0
|_end
F STATISTIC =  0.83576154     WITH    3 AND 1589 D.F.  P-VALUE= 0.47419
WALD CHI-SQUARE STATISTIC =   2.5072846     WITH    3 D.F.  P-VALUE= 0.47398
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_da=0
|_test kq26_ds=0
|_test kq26_dr=0
|_end
F STATISTIC =   1.6978803     WITH    3 AND 1589 D.F.  P-VALUE= 0.16553
WALD CHI-SQUARE STATISTIC =   5.0936410     WITH    3 D.F.  P-VALUE= 0.16507
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.58897
|_test
|_test kq26_ea=0
|_test kq26_es=0
|_test kq26_er=0
|_end
F STATISTIC =  0.53543519     WITH    3 AND 1589 D.F.  P-VALUE= 0.65803
WALD CHI-SQUARE STATISTIC =   1.6063056     WITH    3 D.F.  P-VALUE= 0.65796
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_ga=0
|_test kq26_gs=0
|_test kq26_gr=0
|_end
F STATISTIC =  0.15937492     WITH    3 AND 1589 D.F.  P-VALUE= 0.92365
WALD CHI-SQUARE STATISTIC =  0.47812477     WITH    3 D.F.  P-VALUE= 0.92367
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 1.00000
|_test
|_test kq26_fa=0
|_test kq26_fs=0
|_test kq26_fr=0
|_end
F STATISTIC =   2.5473549     WITH    3 AND 1589 D.F.  P-VALUE= 0.05440
WALD CHI-SQUARE STATISTIC =   7.6420646     WITH    3 D.F.  P-VALUE= 0.05402
UPPER BOUND ON P-VALUE BY CHEBYCHEV INEQUALITY = 0.39256
|_*
|_* DIETARY GUIDELINE FOR FAT
|_*

|_logit fatdgy bmi_sp lfatdiet ne mw west msancc nmsa povcat2 povcat3 &
|     emp regex modex goodh fsyes vegey winter spring summer wkdywkdy &
|     wkdywked age age2 male hs col nhisp black other nvsmoked smoken &
|     lcaldiet preglac kq2fa &
|     kq27s kq27r kq27n kq28s kq28r kq28n kq29s kq29r kq29n &
|     kq321 kq32m kq32g kq33_a2 kq33_a3 kq33_a4 kq33_b2 kq33_b3 kq33_b4 &
|     kq342 kq343 kq344 kq35s kq35m kq351 kq372 kq373 kq374 &
|     kq30s kq30r kq30n kq31s kq31r kq31n kq36s kq36r kq36n &
|     kq26_aa kq26_as kq26_ar kq26_ba kq26_bs kq26_br &
|     kq26_ca kq26_cs kq26_cr kq26_da kq26_ds kq26_dr &
|     kq26_ea kq26_es kq26_er kq26_ga kq26_gs kq26_gr &
|     kq26_fa kq26_fs kq26_fr / rstat iter=100

REQUIRED MEMORY IS PAR= 4805 CURRENT PAR= 7000
FOR MAXIMUM EFFICIENCY USE AT LEAST PAR=  6012
 LOGIT ANALYSIS     DEPENDENT VARIABLE =FATDGY   CHOICES =  2
    1680. TOTAL OBSERVATIONS
     600. OBSERVATIONS AT ONE
```

```
   1080. OBSERVATIONS AT ZERO
 100 MAXIMUM ITERATIONS
CONVERGENCE TOLERANCE =0.00100

LOG OF LIKELIHOOD WITH CONSTANT TERM ONLY =     -1095.0
BINOMIAL  ESTIMATE = 0.3571
ITERATION  0       LOG OF LIKELIHOOD FUNCTION =   -1095.0

ITERATION  1 ESTIMATES
-0.32911E-01 0.21494      0.31346      0.17494      0.16450      -0.67927E-01
-0.16315      0.86579E-01 0.19249     -0.26085      0.52548E-01 0.11411
-0.27356      0.10290      0.31162     -0.11002     -0.25596     -0.34560E-01
 0.15800      0.31107     -0.39622E-01 0.32652E-03-0.77832E-01-0.16175
-0.10945      0.40113     -0.10257      0.48709      0.19545      0.62981E-01
-0.72528E-01 0.72078      0.87083E-01-0.81452E-01-0.11741      0.79875E-02
 0.19358      0.49547      0.20500      0.53226      0.29582      0.49531
-0.89104E-01-0.43881     -0.39853     -0.14137     -0.28842      0.27581
-0.35253E-01-0.32583E-01-0.20602     -0.17333     -0.89008E-01-0.16011
-0.46735     -0.54905     -0.61620     -0.27248     -0.14917E-01-0.46992
 0.72751E-01 0.67171E-01 0.28266     -0.12321     -0.26228     -0.11808
-0.20610E-01-0.28238     -0.18145      0.18255      0.56774E-01 0.22054
 0.28755      0.19675      0.30458E-01 0.17261     -0.28866E-01-0.80875E-01
 0.39533      0.15556      0.89083E-01 0.16414     -0.68137E-01 0.11525
 0.37349E-01 0.18626      0.37118E-01 0.14838     -0.24587     -0.27850
  1.1183
ITERATION  1       LOG OF LIKELIHOOD FUNCTION =   -957.66

ITERATION  2 ESTIMATES
-0.37577E-01 0.21323      0.36631      0.20343      0.20223      -0.65818E-01
-0.18298      0.97588E-01 0.22771     -0.29758      0.55681E-01 0.13733
-0.33566      0.12343      0.31924     -0.14209     -0.31401     -0.52776E-01
 0.19469      0.37642     -0.47871E-01 0.40219E-03-0.82993E-01-0.18060
-0.12106      0.45464     -0.89002E-01 0.56530      0.21361      0.45205E-01
-0.77696E-01 0.73186      0.12278     -0.11226     -0.16174     -0.79580E-02
 0.25682      0.58585      0.26731      0.86661      0.58942      0.81117
-0.97417E-01-0.49262     -0.45990     -0.16751     -0.36768      0.30648
-0.44366E-01-0.36257E-01-0.27016     -0.17942     -0.77595E-01-0.18129
-0.52383     -0.61226     -0.71803     -0.30129     -0.86791E-02-0.64364
 0.64805E-01 0.72199E-01 0.29557     -0.13187     -0.31317     -0.12431
-0.54029E-01-0.37656     -0.24569      0.20258      0.87095E-01 0.25084
 0.32302      0.22110      0.21919E-01 0.17066     -0.35892E-01-0.88643E-01
 0.43358      0.17840      0.10754      0.17038     -0.72299E-01 0.15323
 0.78464E-01 0.24445      0.54585E-01 0.11961     -0.30912     -0.35003
  1.0529
ITERATION  2       LOG OF LIKELIHOOD FUNCTION =   -953.69

ITERATION  3 ESTIMATES
-0.37984E-01 0.21297      0.37054      0.20549      0.20519      -0.65207E-01
-0.18330      0.98778E-01 0.23112     -0.30036      0.55364E-01 0.13809
-0.34134      0.12434      0.32070     -0.14546     -0.31968     -0.54828E-01
 0.19714      0.38172     -0.48723E-01 0.41039E-03-0.83462E-01-0.18179
-0.12117      0.45838     -0.85160E-01 0.57379      0.21441      0.41972E-01
-0.79003E-01 0.73339      0.12673     -0.11548     -0.16645     -0.96276E-02
 0.26352      0.59449      0.27395      0.94777      0.66705      0.89059
-0.98454E-01-0.49767     -0.46734     -0.17054     -0.37576      0.30770
-0.44664E-01-0.36101E-01-0.27773     -0.17952     -0.76527E-01-0.18438
-0.53074     -0.61938     -0.73037     -0.30375     -0.76351E-02-0.66768
 0.64103E-01 0.72915E-01 0.29744     -0.13236     -0.31733     -0.12381
-0.57464E-01-0.38941     -0.25421      0.20526      0.91142E-01 0.25445
 0.32590      0.22266      0.21234E-01 0.17024     -0.36189E-01-0.89580E-01
 0.43805      0.18048      0.11011      0.17106     -0.72415E-01 0.15857
 0.83476E-01 0.25142      0.55897E-01 0.11478     -0.31691     -0.35840
  1.0013
ITERATION  3       LOG OF LIKELIHOOD FUNCTION =   -953.64

ITERATION  4 ESTIMATES
-0.37989E-01 0.21298      0.37057      0.20550      0.20521      -0.65196E-01
```

-0.18327	0.98807E-01	0.23117	-0.30039	0.55358E-01	0.13809
-0.34139	0.12434	0.32070	-0.14550	-0.31974	-0.54850E-01
0.19715	0.38177	-0.48733E-01	0.41049E-03	-0.83464E-01	-0.18180
-0.12116	0.45841	-0.85083E-01	0.57389	0.21441	0.41918E-01
-0.79033E-01	0.73340	0.12676	-0.11552	-0.16650	-0.96223E-02
0.26360	0.59458	0.27402	0.95054	0.66979	0.89334
-0.98460E-01	-0.49771	-0.46744	-0.17059	-0.37583	0.30769
-0.44664E-01	-0.36089E-01	-0.27781	-0.17952	-0.76516E-01	-0.18444
-0.53085	-0.61949	-0.73055	-0.30378	-0.76199E-02	-0.66802
0.64103E-01	0.72933E-01	0.29747	-0.13237	-0.31736	-0.12379
-0.57501E-01	-0.38960	-0.25433	0.20530	0.91203E-01	0.25452
0.32593	0.22267	0.21233E-01	0.17023	-0.36186E-01	-0.89602E-01
0.43811	0.18050	0.11016	0.17107	-0.72410E-01	0.15866
0.83557E-01	0.25153	0.55922E-01	0.11470	-0.31702	-0.35851
0.99891					

VARIABLE NAME	ESTIMATED COEFFICIENT	ASYMPTOTIC STANDARD ERROR	T-RATIO	ELASTICITY AT MEANS	WEIGHTED AGGREGATE ELASTICITY
BMI_SP	-0.37989E-01	0.11354E-01	-3.3457	-0.67425	-0.47976
LFATDIET	0.21298	0.22232	0.95799	0.10759E-01	0.82385E-02
NE	0.37057	0.17398	2.1300	0.44367E-01	0.34188E-01
MW	0.20550	0.15687	1.3100	0.35147E-01	0.25427E-01
WEST	0.20521	0.16757	1.2246	0.29302E-01	0.21595E-01
MSANCC	-0.65196E-01	0.14310	-0.45561	-0.19086E-01	-0.14023E-01
NMSA	-0.18327	0.16607	-1.1035	-0.34042E-01	-0.23283E-01
POVCAT2	0.98807E-01	0.17589	0.56177	0.23777E-01	0.16804E-01
POVCAT3	0.23117	0.19337	1.1955	0.61145E-01	0.45868E-01
EMP	-0.30039	0.14739	-2.0381	-0.12629	-0.89122E-01
REGEX	0.55358E-01	0.13166	0.42045	0.18716E-01	0.13667E-01
MODEX	0.13809	0.19083	0.72362	0.11699E-01	0.86609E-02
GOODH	-0.34139	0.17663	-1.9328	-0.19595	-0.14060
FSYES	0.12434	0.22779	0.54583	0.88525E-02	0.60481E-02
VEGEY	0.32070	0.37760	0.84931	0.59954E-02	0.47666E-02
WINTER	-0.14550	0.17724	-0.82096	-0.20430E-01	-0.14593E-01
SPRING	-0.31974	0.16658	-1.9194	-0.60155E-01	-0.41670E-01
SUMMER	-0.54850E-01	0.16276	-0.33700	-0.10821E-01	-0.80007E-02
WKDYWKDY	0.19715	0.36912	0.53410	0.64146E-01	0.45472E-01
WKDYWKED	0.38177	0.36970	1.0326	0.12406	0.90849E-01
AGE	-0.48733E-01	0.21854E-01	-2.2300	-1.5820	-1.1401
AGE2	0.41049E-03	0.21615E-03	1.8991	0.72344	0.52455
MALE	-0.83464E-01	0.13353	-0.62504	-0.29347E-01	-0.20133E-01
HS	-0.18180	0.18539	-0.98064	-0.40278E-01	-0.27549E-01
COL	-0.12116	0.19102	-0.63427	-0.39276E-01	-0.29423E-01
NHISP	0.45841	0.28014	1.6363	0.28481	0.20531
BLACK	-0.85083E-01	0.21097	-0.40329	-0.66669E-02	-0.43574E-02
OTHER	0.57389	0.28052	2.0458	0.24197E-01	0.18702E-01
NVSMOKED	0.21441	0.14850	1.4439	0.69250E-01	0.52109E-01
SMOKEN	0.41918E-01	0.17246	0.24306	0.70695E-02	0.50496E-02
LCALDIET	-0.79033E-01	0.25629	-0.30837	-0.27978E-02	-0.21375E-02
PREGLAC	0.73340	0.57030	1.2860	0.43757E-02	0.37885E-02
KQ2FA	0.12676	0.20808	0.60919	0.76587E-01	0.55711E-01
KQ27S	-0.11552	0.14579	-0.79237	-0.18195E-01	-0.13826E-01
KQ27R	-0.16650	0.21933	-0.75914	-0.98017E-02	-0.75735E-02
KQ27N	-0.96223E-02	0.24728	-0.38913E-01	-0.49373E-03	-0.38083E-03
KQ28S	0.26360	0.16524	1.5952	0.63958E-01	0.45588E-01
KQ28R	0.59458	0.19192	3.0981	0.89159E-01	0.69693E-01
KQ28N	0.27402	0.20990	1.3055	0.31826E-01	0.25005E-01
KQ29S	0.95054	0.48719	1.9511	0.19169	0.13402
KQ29R	0.66979	0.49032	1.3660	0.16438	0.11752
KQ29N	0.89334	0.49182	1.8164	0.18122	0.14052
KQ32L	-0.98460E-01	0.20290	-0.48527	-0.28393E-01	-0.22243E-01
KQ32M	-0.49771	0.21963	-2.2661	-0.11779	-0.77715E-01
KQ32G	-0.46744	0.27656	-1.6902	-0.34954E-01	-0.20600E-01
KQ33_A2	-0.17059	0.13331	-1.2797	-0.51297E-01	-0.36462E-01

KQ33_A3	-0.37583	0.19490	-1.9283	-0.36027E-01	-0.22988E-01
KQ33_A4	0.30769	0.24649	1.2483	0.13830E-01	0.10393E-01
KQ33_B2	-0.44664E-01	0.13328	-0.33513	-0.12489E-01	-0.87522E-02
KQ33_B3	-0.36089E-01	0.22684	-0.15910	-0.23542E-02	-0.14887E-02
KQ33_B4	-0.27781	0.39456	-0.70411	-0.54146E-02	-0.31286E-02
KQ342	-0.17952	0.18920	-0.94881	-0.41057E-01	-0.30662E-01
KQ343	-0.76516E-01	0.20051	-0.38161	-0.17804E-01	-0.12710E-01
KQ344	-0.18444	0.24751	-0.74517	-0.19514E-01	-0.11920E-01
KQ35S	-0.53085	0.55022	-0.96479	-0.11212	-0.87491E-01
KQ35M	-0.61949	0.55195	-1.1224	-0.22669	-0.16176
KQ35L	-0.73055	0.56964	-1.2825	-0.55791E-01	-0.32055E-01
KQ372	-0.30378	0.14123	-2.1510	-0.72982E-01	-0.52974E-01
KQ373	-0.76199E-02	0.16700	-0.45629E-01	-0.11790E-02	-0.84809E-03
KQ374	-0.66802	0.24069	-2.7754	-0.48624E-01	-0.25375E-01
KQ30S	0.64103E-01	0.23406	0.27388	0.18766E-01	0.12736E-01
KQ30R	0.72933E-01	0.25033	0.29134	0.14650E-01	0.11098E-01
KQ30N	0.29747	0.26482	1.1233	0.34550E-01	0.27741E-01
KQ31S	-0.13237	0.14142	-0.93595	-0.26430E-01	-0.18706E-01
KQ31R	-0.31736	0.23064	-1.3760	-0.19818E-01	-0.12170E-01
KQ31N	-0.12379	0.18687	-0.66243	-0.14919E-01	-0.95392E-02
KQ36S	-0.57501E-01	0.15683	-0.36665	-0.83023E-02	-0.53378E-02
KQ36R	-0.38960	0.32960	-1.1820	-0.11158E-01	-0.61631E-02
KQ36N	-0.25433	0.31678	-0.80286	-0.12342E-01	-0.76350E-02
KQ26_AA	0.20530	0.18057	1.1370	0.29397E-01	0.23022E-01
KQ26_AS	0.91203E-01	0.16393	0.55635	0.21476E-01	0.15709E-01
KQ26_AR	0.25452	0.19982	1.2738	0.27030E-01	0.18471E-01
KQ26_BA	0.32593	0.15462	2.1080	0.78563E-01	0.62395E-01
KQ26_BS	0.22267	0.19694	1.1306	0.19751E-01	0.14221E-01
KQ26_BR	0.21233E-01	0.21560	0.98485E-01	0.16553E-02	0.11141E-02
KQ26_CA	0.17023	0.20768	0.81966	0.15167E-01	0.12123E-01
KQ26_CS	-0.36186E-01	0.17121	-0.21135	-0.63617E-02	-0.48417E-02
KQ26_CR	-0.89602E-01	0.18878	-0.47463	-0.11191E-01	-0.79089E-02
KQ26_DA	0.43811	0.20008	2.1897	0.47573E-01	0.37735E-01
KQ26_DS	0.18050	0.15841	1.1394	0.45087E-01	0.34315E-01
KQ26_DR	0.11016	0.20100	0.54805	0.11392E-01	0.77839E-02
KQ26_EA	0.17107	0.18727	0.91351	0.31300E-01	0.25212E-01
KQ26_ES	-0.72410E-01	0.17449	-0.41498	-0.15323E-01	-0.10910E-01
KQ26_ER	0.15866	0.22973	0.69064	0.11170E-01	0.78721E-02
KQ26_GA	0.83557E-01	0.32721	0.25536	0.92726E-02	0.71068E-02
KQ26_GS	0.25153	0.30273	0.83087	0.11556	0.84182E-01
KQ26_GR	0.55922E-01	0.35545	0.15733	0.35144E-02	0.21756E-02
KQ26_FA	0.11470	0.25756	0.44534	0.11223E-01	0.89344E-02
KQ26_FS	-0.31702	0.21924	-1.4460	-0.12925	-0.92971E-01
KQ26_FR	-0.35851	0.25622	-1.3992	-0.36791E-01	-0.24499E-01
CONSTANT	0.99891	1.1259	0.88720	0.66750	0.48018

LOG-LIKELIHOOD FUNCTION = -953.64
LOG-LIKELIHOOD(0) = -1095.0
LIKELIHOOD RATIO TEST = 282.620 WITH 90 D.F.

MADDALA R-SQUARE 0.1548
CRAGG-UHLER R-SQUARE 0.21256
MCFADDEN R-SQUARE 0.12906
ADJUSTED FOR DEGREES OF FREEDOM 0.79726E-01
APPROXIMATELY F-DISTRIBUTED 0.14983 WITH 90 AND 91 D.F.
CHOW R-SQUARE 0.16249

PREDICTION SUCCESS TABLE

		ACTUAL	
		0	1
	0	926.	347.
PREDICTED	1	154.	253.

NUMBER OF RIGHT PREDICTIONS = 0.118E+04
PERCENTAGE OF RIGHT PREDICTIONS = 0.70179

Appendix H.

Variable Definitions

Variable Name	Description
PCT FAT	Percentage of calories from total fat
PCTSFAT	Percentage of calories from saturated fat
FATDGY	1 if dietary guidelines for total fat met 0 if dietary guidelines for total fat are not met
BMI_SP	Body Mass Index
LFATDIET	1 if individual or low-fat diet 0 if individual not on low-fat diet
NE	1 if individual resides in the Northeast 0 otherwise
MW	1 if individual resides in the Midwest 0 otherwise
WEST	1 if individual resides in the West 0 otherwise
MSANCC	1 if individual resides outside central city but within a MSA 0 otherwise
NMSA	1 if individual resides in a non MSA 0 otherwise
POVCAT2	1 if 131% to 350% of poverty threshold 0 otherwise
POVCAT3	1 if over 350% of poverty threshold 0 otherwise

Variable Name	Description
EMP	1 if individual employed 0 otherwise
REGEX	1 if individual exercises at least 2-4 times/week 0 otherwise
MODEX	1 if individual exercises 1-3 times/week 0 otherwise
GOOD#	1 if individual health status reported to be good, very good, or excellent 0 otherwise
FSYES	1 if individual receives Food Stamps 0 otherwise
VEGET	1 if individual a vegetarian 0 otherwise
WINTER	1 if survey conducted in January, February, or March 0 otherwise
SPRING	1 if survey conducted in April, May, or June 0 otherwise
SUMMER	1 if survey conducted in July, August, and September 0 otherwise
WKDYWKDY	1 if both days of the survey were weekdays 0 otherwise
WKDYWKED	1 if the days of the survey were a weekday and a weekend 0 otherwise

Variable Name	Description
AGE	age of the individual (20 to 90 inclusive)
MALE	1 if male 0 if female
HS	household size
COL	1 if individual had some college education 0 otherwise
NHISP	1 if individual non-Hispanic 0 otherwise
BLACK	1 if individual black 0 otherwise
OTHER	1 if individual Asian, native American, or other 0 otherwise
NVSMOKED	1 if individual never smoked 0 otherwise
SMOKER	1 if individual currently smokes 0 otherwise
LCALDIET	1 if individual on low-calorie diet 0 otherwise
PREGLAC	1 if individual either is pregnant or lactating 0 otherwise
KQ2FA	1 if individual agrees that what you eat can make a big difference in the chances at getting a disease, like heart disease or cancer 0 otherwise